

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>			5. MINERAL LEASE NO: ML-22651	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>			7. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			8. UNIT or CA AGREEMENT NAME: Natural Buttes Unit	
2. NAME OF OPERATOR: Kerr-McGee Oil & Gas Onshore, LP			9. WELL NAME and NUMBER: NBU 1022-02F	
3. ADDRESS OF OPERATOR: 1099 18th Street #1200 CITY Denver STATE CO ZIP 80202			PHONE NUMBER: (720) 929-6226	10. FIELD AND POOL, OR WILDCAT: Natural Buttes Field
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 2393' FNL & 1353' FWL AT PROPOSED PRODUCING ZONE: N/A			11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 10S 22E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 25 Miles Notheast of Ouray, Utah			12. COUNTY: Uintah	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 1353'	16. NUMBER OF ACRES IN LEASE: 620.25	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40		
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 500'	19. PROPOSED DEPTH: 8,550	20. BOND DESCRIPTION: RLB0005237		
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5017 GR	22. APPROXIMATE DATE WORK WILL START: ASAP	23. ESTIMATED DURATION: 10 Days		

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
14"		40	Premium Cement	215 sx	1.18 15.6
			Premium Cement	100 sx	1.18 15.6
12 1/4"	9 5/8" J-55 36#	2,200	Premium Cement	230 sx	3.82 11
			Premium Cement	180 sx	1.18 15.6
7 7/8"	4 1/2" I-80 11.6#	8,570	Premium Lite II	400 sx	3.38 11
		8550	50/50 Poz/G	1360 sx	1.31 14.3

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Kevin McIntyre TITLE Regulatory Analyst

SIGNATURE *Kevin McIntyre* DATE 2/22/2008

**RECEIVED**  
**FEB 26 2008**  
DIV. OF OIL, GAS & MINING

(This space for State use only)

API NUMBER ASSIGNED: 43-047-39954

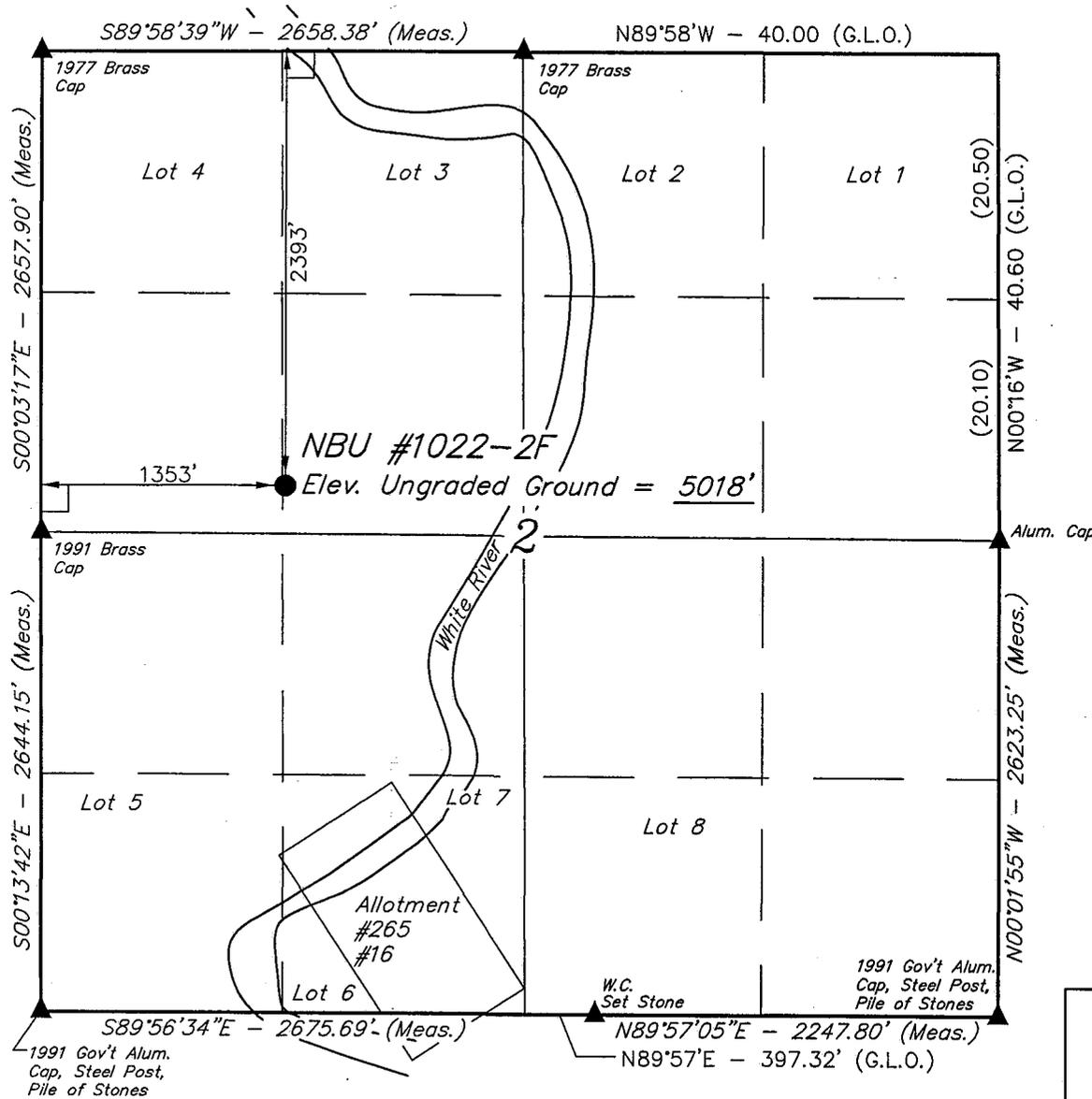
**Approved by the  
Utah Division of  
Oil, Gas and Mining**

APPROVAL: \_\_\_\_\_  
Date: 11-04-08  
By: *[Signature]*

# T10S, R22E, S.L.B.&M.

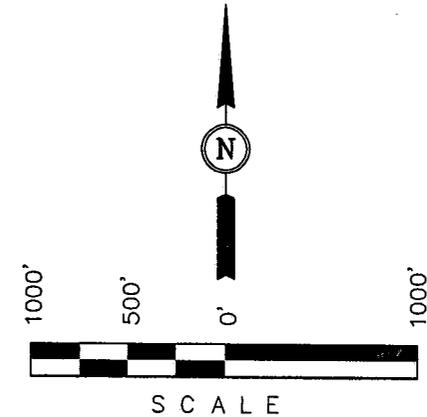
## Kerr-McGee Oil & Gas Onshore LP

Well location, NBU #1022-2F, located as shown in the SE 1/4 NW 1/4 of Section 2, T10S, R22E, S.L.B.&M. Uintah County, Utah.



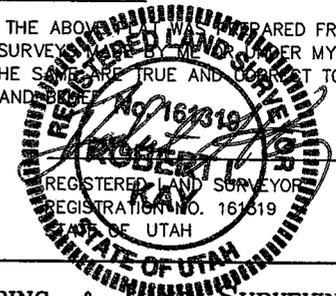
### BASIS OF ELEVATION

BENCH MARK (20EAM) LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.



### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE SURVEY WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYING UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



**UINTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

### LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- = SECTION CORNERS LOCATED.

(NAD 83)  
 LATITUDE = 39°58'43.29" (39.978692)  
 LONGITUDE = 109°24'42.69" (109.411858)  
 (NAD 27)  
 LATITUDE = 39°58'43.41" (39.978725)  
 LONGITUDE = 109°24'40.23" (109.411175)

SCALE 1" = 1000'	DATE SURVEYED: 01-04-08	DATE DRAWN: 01-07-08
PARTY D.R. A.W. C.P.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE Kerr-McGee Oil & Gas Onshore LP	

**NBU 1022-02F  
SENW Sec. 2, T10S,R22E  
UINTAH COUNTY, UTAH  
ML-22651**

**ONSHORE ORDER NO. 1**

***DRILLING PROGRAM***

**1. Estimated Tops of Important Geologic Markers:**

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1063'
Wasatch	4194'
Mesaverde	6545'
TD	8550'

**2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Water	Bird's Nest	1362'
	Green River	1063'
	Mahogany	1736'
Gas	Wasatch	4194'
Gas	Mesaverde	6545'
Other Minerals	N/A	

**3. Pressure Control Equipment (Schematic Attached)**

*Please refer to the attached Drilling Program.*

**4. Proposed Casing & Cementing Program:**

*Please refer to the attached Drilling Program.*

**5. Drilling Fluids Program:**

*Please refer to the attached Drilling Program.*

**6. Evaluation Program:**

*Please refer to the attached Drilling Program.*

**7. Abnormal Conditions:**

Maximum anticipated bottomhole pressure calculated at 8550' TD, approximately equals <sup>6301</sup>~~3232~~ psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 1881 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

9. **Variances:**

*Please refer to the attached Drilling Program.*

10. **Other Information:**

*Please refer to the attached Drilling Program.*



## KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME KERR-McGEE OIL & GAS ONSHORE LP DATE February 15, 2008  
 WELL NAME NBU 1022-02F TD 8,550' MD/TVD \_\_\_\_\_  
 FIELD Natural Buttes COUNTY Uintah STATE Utah ELEVATION 5,017' GL KB 5,032'  
 SURFACE LOCATION 2393' FNL & 1353' FWL BHL Straight Hole  
 Latitude: 39.978692 Longitude: -109.411858  
 OBJECTIVE ZONE(S) Wasatch/Mesaverde  
 ADDITIONAL INFO Regulatory Agencies: BLM (SURF & MINERALS), UDOGM, Tri-County Health Dept.

GEOLOGICAL FORMATION		MECHANICAL			
LOGS	TOPS	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4"	9-5/8", 36# J-55, LTC	Air mist
Catch water sample, if possible, from 0 to <b>4,194'</b> Green River @ <b>1,063'</b> Top of Birds Nest Water @ <b>1,362'</b> Preset f/ GL @ <b>2,200' MD</b>					
Note: 12.25" surface hole will usually be drilled ±400' below the bottom of lost circulation zone. Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.					
	Mahogany @	1,736'			Water/Fresh Water Mud
Mud logging program TBD Open hole logging program f/ TD - surf csg			7-7/8"	4-1/2", 11.6#, I-80 or equivalent LTC casing	8.3-11.5 ppg
	Wasatch @	4,194'			
	Mverde @	6,545'			
	MVU2 @	7,453'			
	MVL1 @	8,010'			
	TD @	8,550'			Max anticipated Mud required 11.5 ppg



**KERR-McGEE OIL & GAS ONSHORE LP**  
**DRILLING PROGRAM**

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
SURFACE	9-5/8"	0 to 2,200'	36.00	J-55	LTC	3520 1.09 7780	2020 1.96 6350	453000 6.53 201000
PRODUCTION	4-1/2"	0 to 8550'	11.60	I-80	LTC	2.41	1.24	2.32

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)  
 2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD)  
 (Burst Assumptions: TD = 11.5 ppg) .22 psi/ft = gradient for partially evac wellbore  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)  
 MASP 3232 psi

**CEMENT PROGRAM**

		FT.-OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl + .25 pps flocele	215	60%	15.60	1.18
<b>Option 1</b>	TOP OUT CMT (1)	250	20 gals sodium silicate + Premium cmt + 2% CaCl + .25 pps flocele	100		15.60	1.18
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE	<b>Option 2</b>		<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>				
	LEAD	2000	Prem cmt + 16% Gel + 10 pps gilsonite + .25 pps Flocele + 3% salt BWOC	230	35%	11.00	3.82
	TAIL	500	Premium cmt + 2% CaCl + .25 pps flocele	180	35%	15.60	1.18
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PRODUCTION	LEAD	3,690'	Premium Lite II + 3% KCl + 0.25 pps celloflake + 5 pps gilsonite + 10% gel + 0.5% extender	400	60%	11.00	3.38
	TAIL	4,860'	50/50 Poz/G + 10% salt + 2% gel +.1% R-3	1360	60%	14.30	1.31

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained  
 \*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

**FLOAT EQUIPMENT & CENTRALIZERS**

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

**ADDITIONAL INFORMATION**

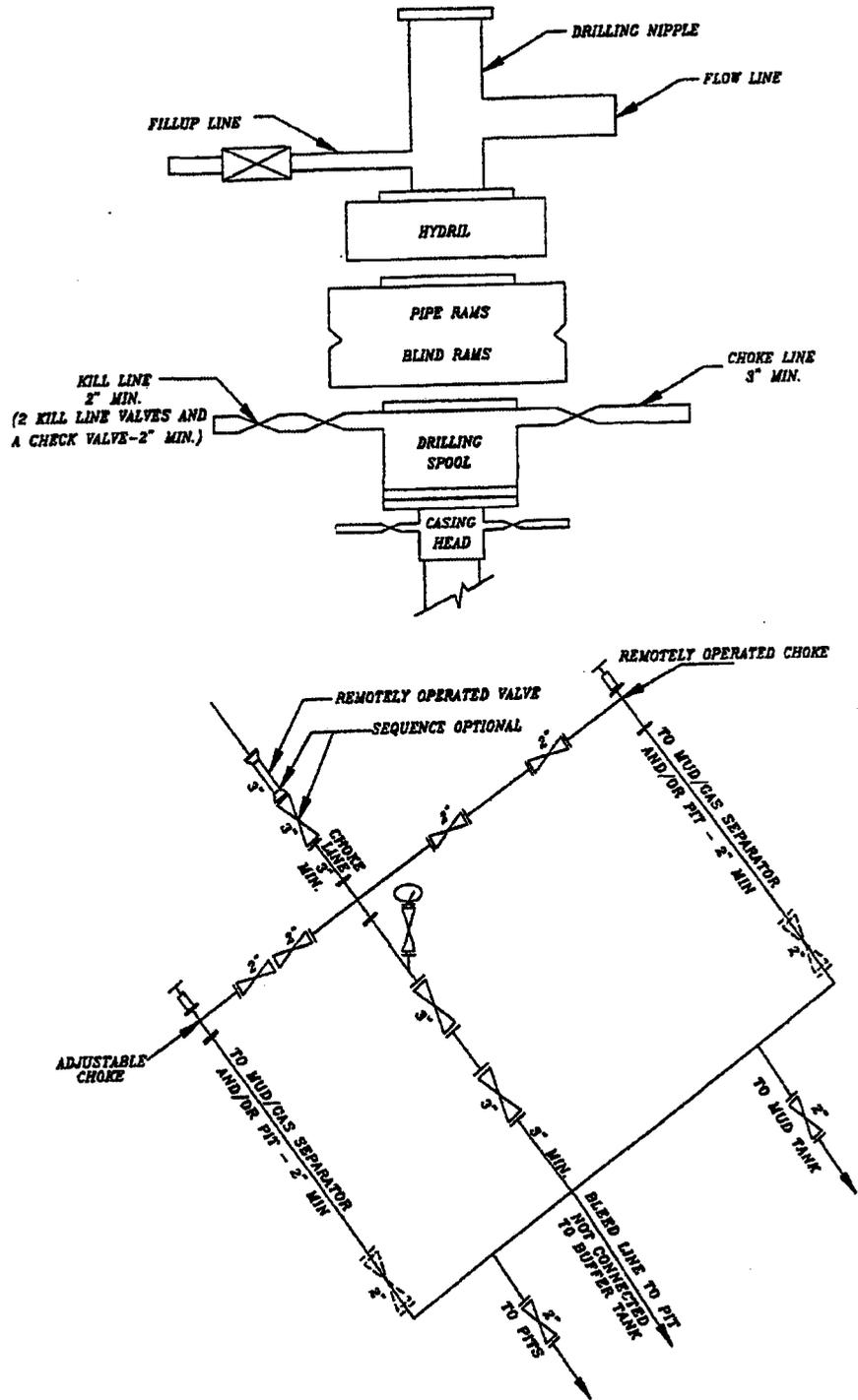
Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.  
 BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.  
 Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.  
 Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: \_\_\_\_\_  
 Brad Laney

DRILLING SUPERINTENDENT: \_\_\_\_\_  
 Randy Bayne

DATE: \_\_\_\_\_  
 DATE: \_\_\_\_\_

EXHIBIT A



**SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK**

NBU 1022-02F  
SENV SEC 2-T10S-R22E  
UINTAH COUNTY, UTAH  
ML-22651

ONSHORE ORDER NO. 1

*MULTI-POINT SURFACE USE & OPERATIONS PLAN*

1. **Existing Roads:**

Directions to the proposed location are attached.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.

2. **Planned Access Roads:**

The proposed access road is approximately 0.2 Miles +/- . Refer to Topo Map B.

The access road will be crowned (2 to 3%), ditched and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet. Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Surface disturbance and vehicular traffic will be limited to the proposed location and proposed access route. Any additional area needed will be approved in advance. All construction shall be in conformance with the standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. 1989.

The road surface and shoulders will be kept in a safe and usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear and free-flowing and will be maintained according to original construction standards. The access road surface will be kept free of trash during operations. All traffic will be confined to the approved disturbed surface. Road drainage crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing or shall the drainages be blocked by the road bed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Should mud holes develop, they shall be filled in and detours around them avoided. When snow is removed from the road during the winter months, the snow shall be pushed outside of the borrow ditches, and the turnouts kept clear so that snowmelt will be channeled away from the road.

3. **Location of Existing Wells Within a 1-Mile Radius:**

Please refer to Topo Map C.

**4. Location of Existing & Proposed Facilities:**

*The following guidelines will apply if the well is productive.*

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks, and/or heater/treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank, and be independent of the back cut.

All permanent (on-site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the five state Rocky Mountain Inter-Agency Committee.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon (2.5 Y 6/2) as determined during the on-site inspection.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Refer to Topo Map D for the placement of the proposed pipeline.

**5. Location and Type of Water Supply:**

Water for drilling purposes will be obtained from Dalbo Inc.'s underground well located in Ouray, Utah, Sec.32, T4S,R3E, Water User Claim #43-8496, Application #53617.

Where available a 2" or 3" poly pipe will be installed with the existing rights-of-way to supply water during drilling and completion operations. There will be no new disturbance needed and the poly line will be removed after completion operations. The fresh water will be supplied from the power plant located within the following Sections 23, 24, 25, 26, 35, & 36, T8S, R23E.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

**6. Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

**7. Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of 20 mil thick and felt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site.

A chemical porta-toilet will be furnished with the drilling rig.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

*Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S, R21E, Ace Oilfield, Sec. 2, T6S, R20E; MC&MC, Sec. 12, T6S, R19E. (Request is in lieu of filing Form 3160-5, after initial production).*

**8. Ancillary Facilities:**

None are anticipated.

9. **Well Site Layout:** (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched, by using a stretching device, before it is attached to corner posts.

The reserve pit fencing will be on three sides during drilling operations, and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

10. **Plans for Reclamation of the Surface:**

*Producing Location:*

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, materials, trash, and debris not required for production.

Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.

To prevent surface water(s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface three feet above surrounding ground surface to allow the reclaimed pit area to drain effectively.

Upon completion of backfilling, leveling, and recontouring of the pit, the stockpiled topsoil will be spread evenly over the location up to the rig anchor points, the location shall be reshaped to the

original contour to the extent possible, and the location will be reseeded with Crested Wheatgrass using appropriate reclamation methods.

*Dry Hole/Abandoned Location:*

Abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions, and re-establishment of vegetation as specified.

All disturbed surfaces will be recontoured to the approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. Reseeding operations will be performed after completion of other reclamation operations.

**11. Surface Ownership:**

State of Utah  
SITLA  
675 E. 500 S., Suite 500  
Salt Lake City, UT 84102-2818  
(801) 538-5300

**12. Other Information:**

A Class III archaeological survey and a paleontological survey have been completed and the reports will be submitted separately.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, the approved Plan of Operations, and any applicable Notice of Lessees. The Operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance. The Operator will control noxious weeds along Rights-Of-Way for roads, pipelines, well sites, or other applicable facilities.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

**13. Lessee's or Operators's Representative & Certification:**

Kevin McIntyre  
Regulatory Analyst  
Kerr-McGee Oil & Gas Onshore LP  
1099 18<sup>th</sup> Street #1200  
Denver, CO 80202  
(720) 929-6226

Randy Bayne  
Drilling Manager  
Kerr-McGee Oil & Gas Onshore LP  
1368 South 1200 East  
Vernal, UT 84078  
(435)781-7018

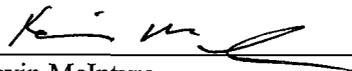
**Certification:** All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and the conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for the lease activities is being provided by Statewide Bond #RLB0005237.

I hereby certify that the proposed drill site and access route has been inspected and that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

  
\_\_\_\_\_  
Kevin McIntyre

Date February 21, 2008

# Kerr-McGee Oil & Gas Onshore LP

NBU #1022-2F

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 2, T10S, R22E, S.L.B.&M.

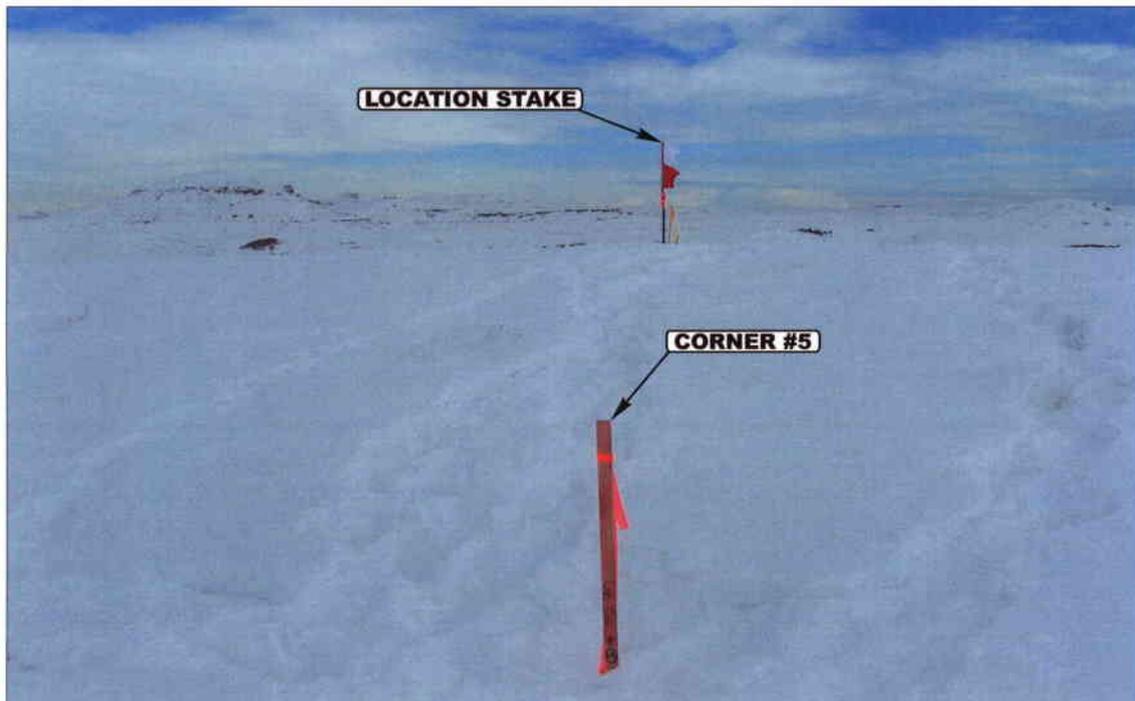


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: EASTERLY

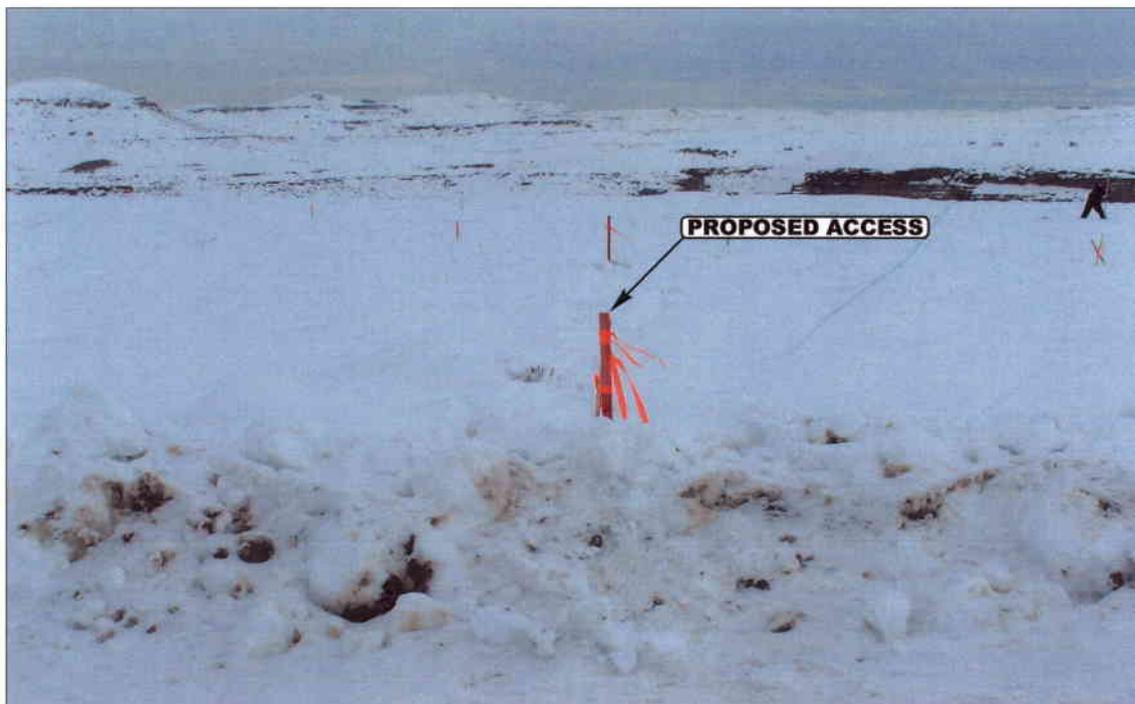


PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: EASTERLY



- Since 1964 -

Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

01 07 08  
MONTH DAY YEAR

PHOTO

TAKEN BY: D.R.

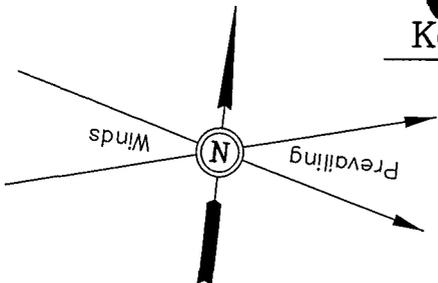
DRAWN BY: GL.

REVISED: 00-00-00

Kerr-McGee Oil & Gas Onshore LP

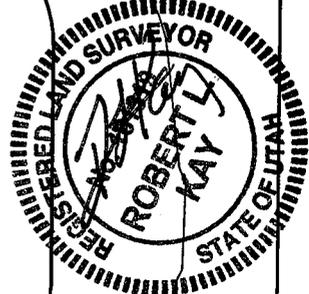
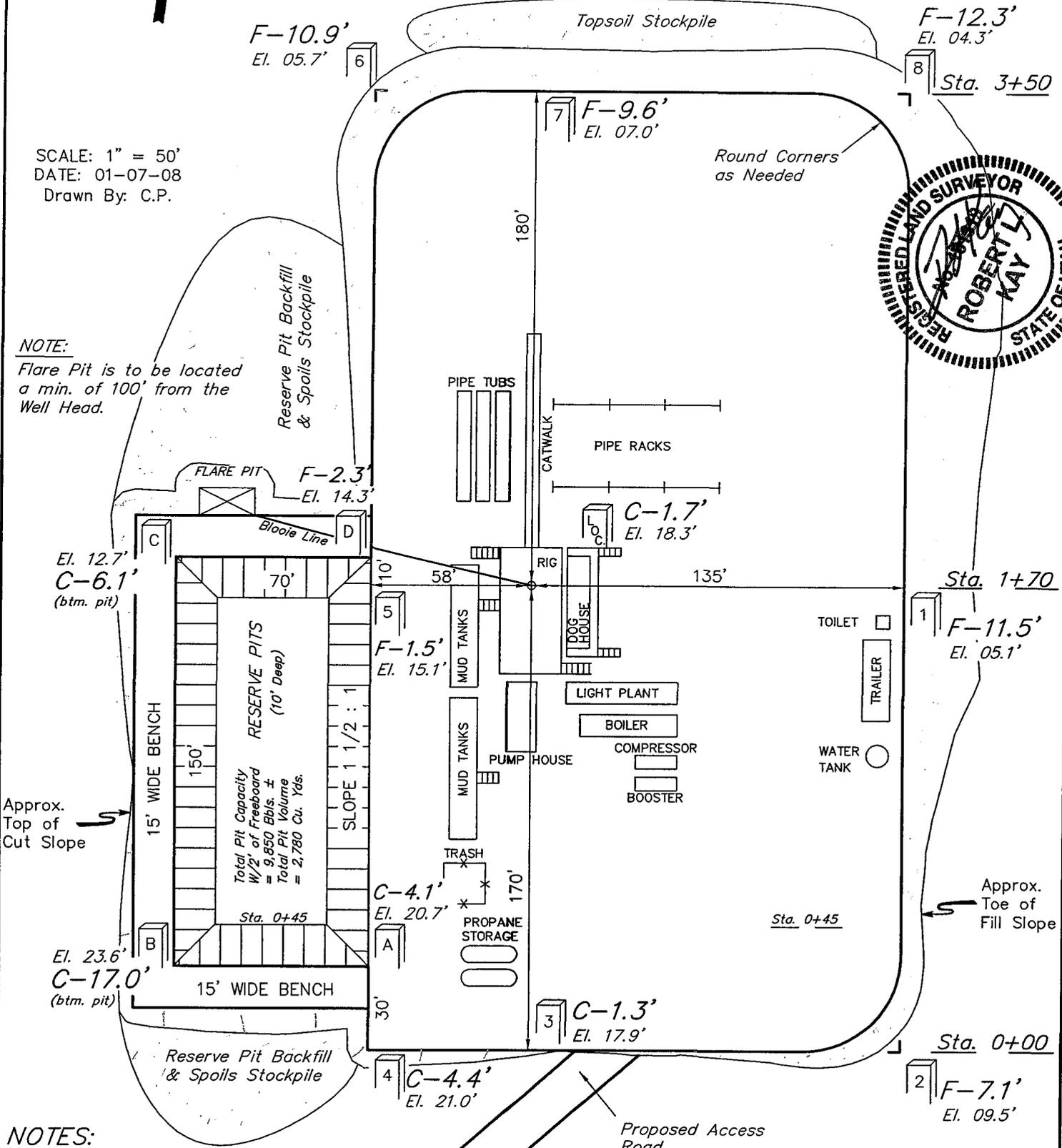
FIGURE #1

LOCATION LAYOUT FOR  
 NBU #1022-2F  
 SECTION 2, T10S, R22E, S.L.B.&M.  
 2393' FNL 1353' FWL



SCALE: 1" = 50'  
 DATE: 01-07-08  
 Drawn By: C.P.

NOTE:  
 Flare Pit is to be located  
 a min. of 100' from the  
 Well Head.



NOTES:  
 Elev. Ungraded Ground At Loc. Stake = 5018.3'  
 FINISHED GRADE ELEV. AT LOC. STAKE = 5016.6'

UINTAH ENGINEERING & LAND SURVEYING  
 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# Kerr-McGee Oil & Gas Onshore LP

FIGURE #2

## TYPICAL CROSS SECTIONS FOR

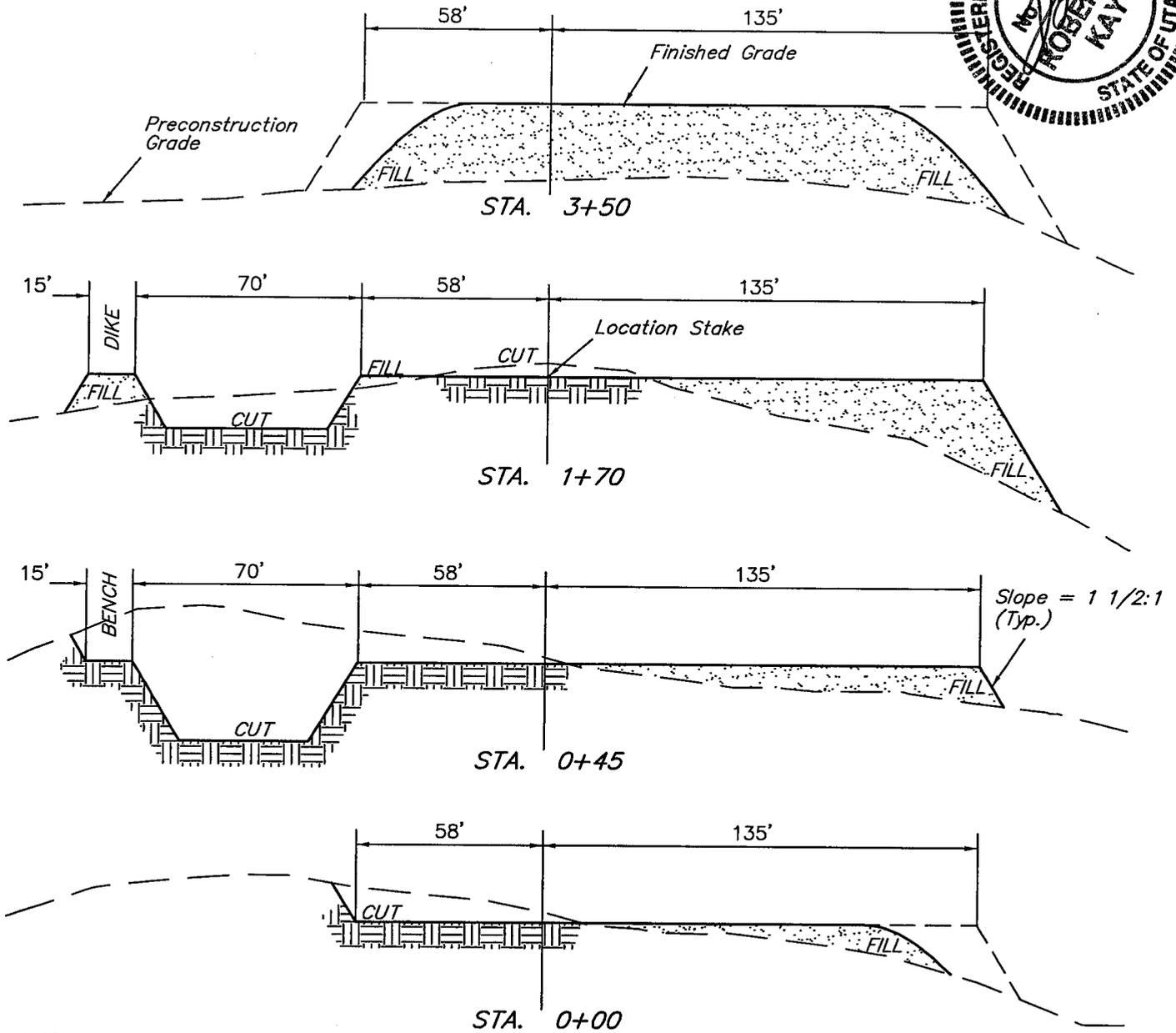
NBU #1022-2F

SECTION 2, T10S, R22E, S.L.B.&M.

2393' FNL 1353' FWL

1" = 20'  
X-Section  
Scale  
1" = 50'

DATE: 01-07-08  
Drawn By: C.P.



**NOTE:**

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

**\* NOTE:**

FILL QUANTITY INCLUDES 5% FOR COMPACTION

**APPROXIMATE YARDAGES**

**CUT**

(12") Topsoil Stripping = 1,910 Cu. Yds.

Remaining Location = 4,920 Cu. Yds.

**TOTAL CUT = 6,830 CU.YDS.**

**FILL = 14,520 CU.YDS.**

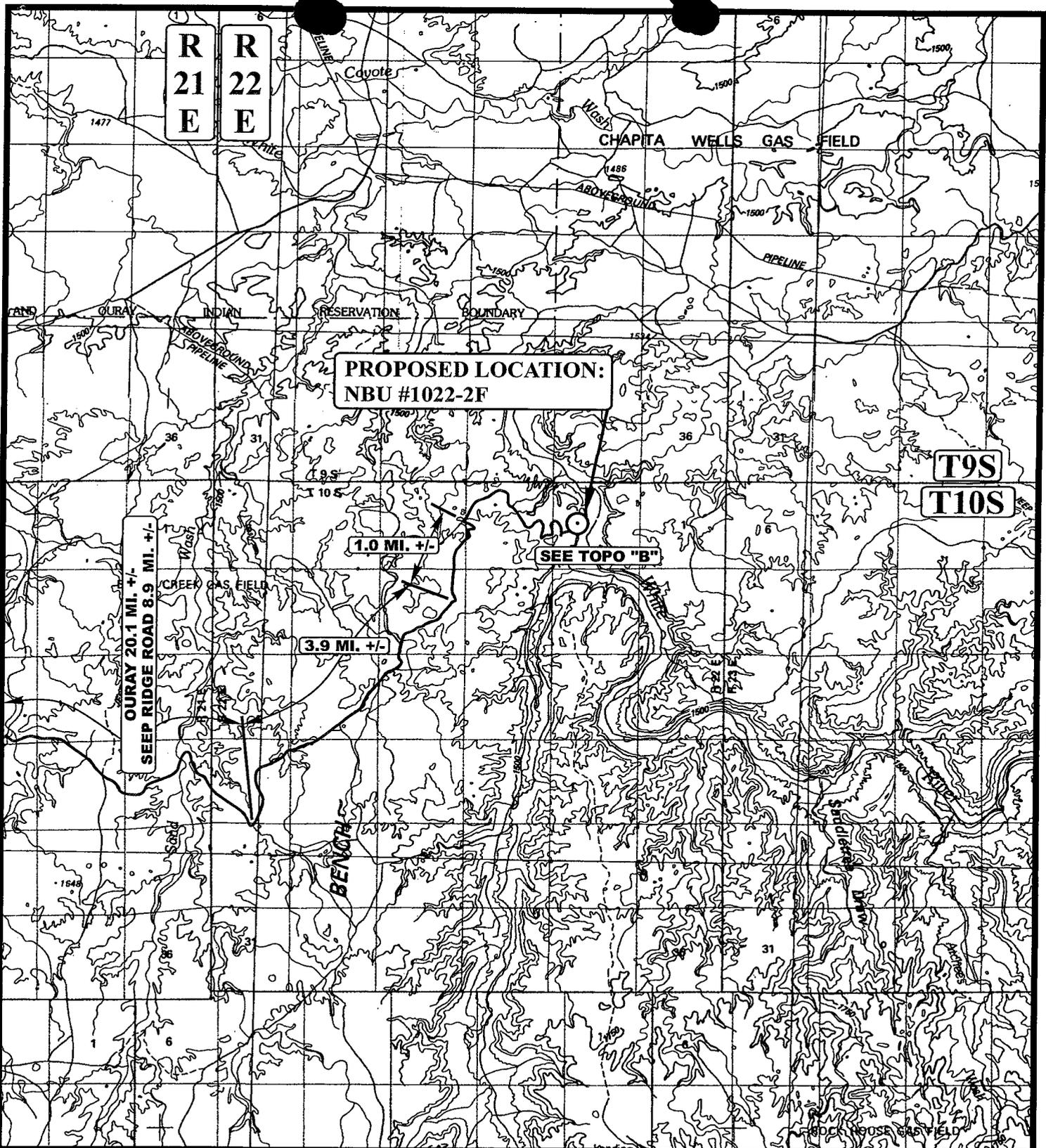
DEFICITE MATERIAL = 7,690 Cu. Yds.

Topsoil & Pit Backfill = 3,300 Cu. Yds.  
(1/2 Pit Vol.)

DEFICITE UNBALANCE = 10,990 Cu. Yds.  
(After Interim Rehabilitation)

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**LEGEND:**

⊙ PROPOSED LOCATION



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



**Kerr-McGee Oil & Gas Onshore LP**

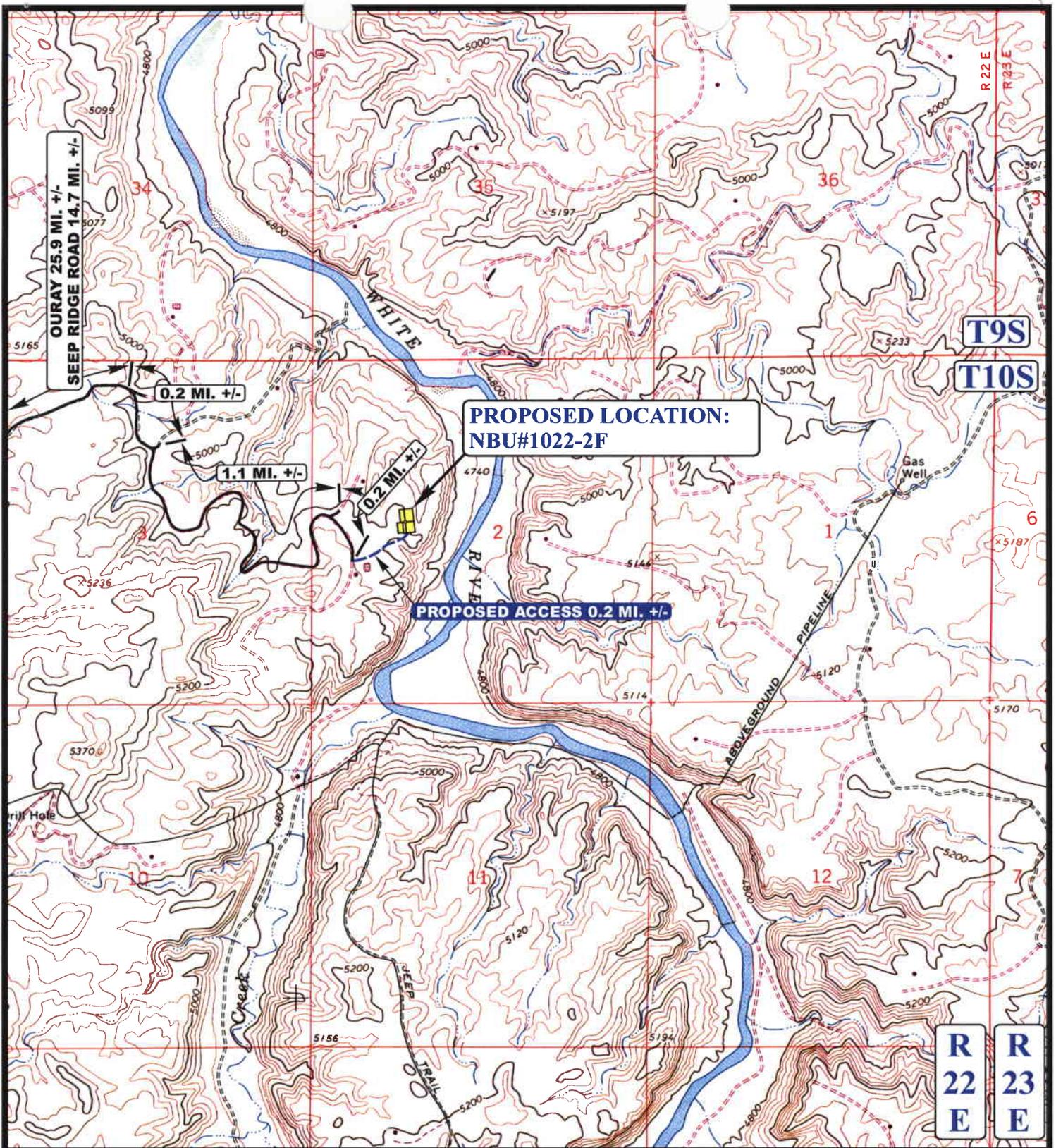
NBU #1022-2F  
 SECTION 2, T10S, R22E, S.L.B.&M.  
 2393' FNL 1353' FWL

TOPOGRAPHIC  
 MAP

01	07	08
MONTH	DAY	YEAR

SCALE: 1:100,000 | DRAWN BY: GL. | REVISED: 00-00-00





**LEGEND:**

- EXISTING ROAD
- PROPOSED ACCESS ROAD



**Kerr McGee Oil & Gas Onshore LP**

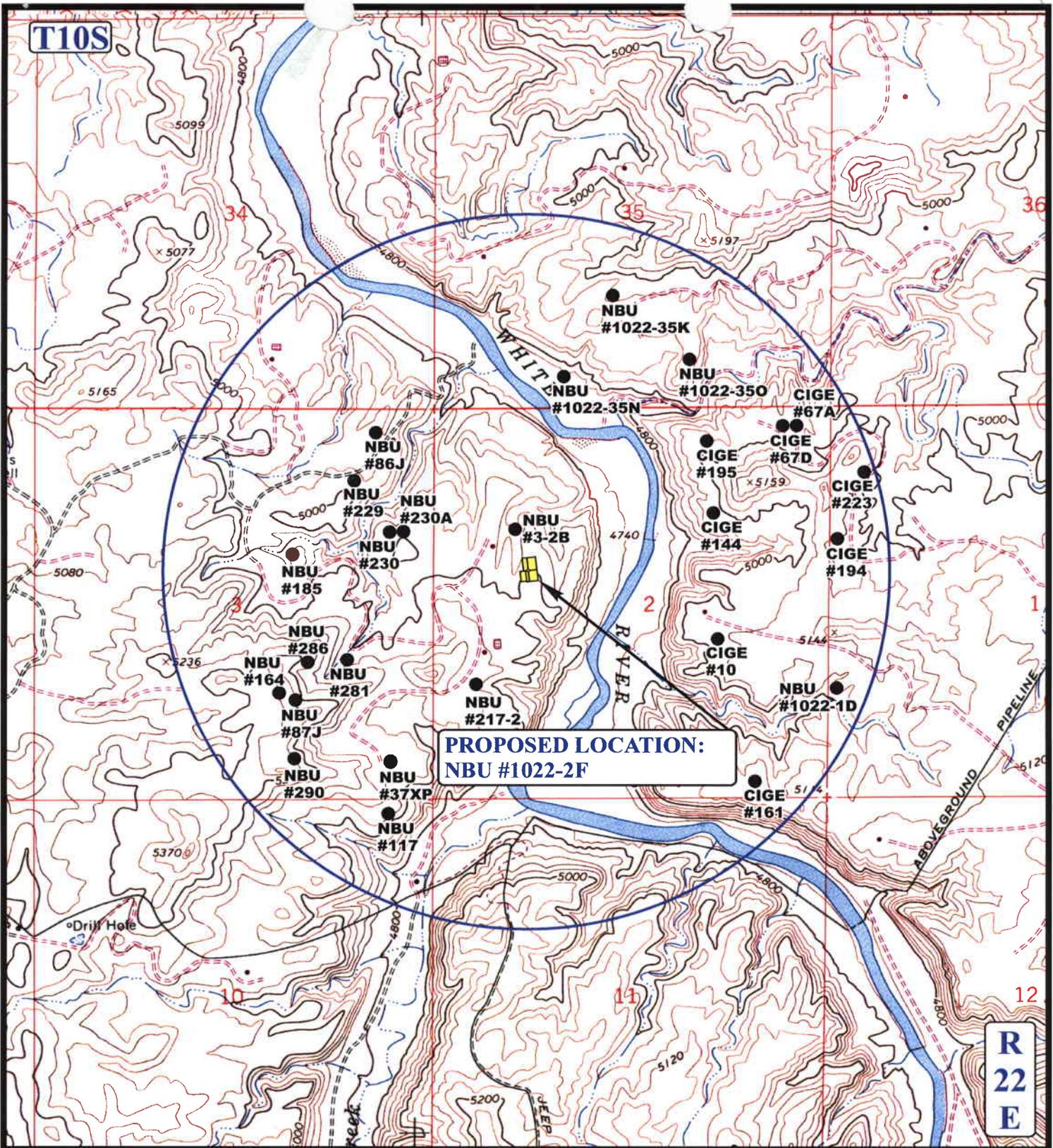
**NBU #1022-2F**  
**SECTION 2, T10S, R22E, S.L.B.&M.**  
**2393' FNL 1353' FWL**



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 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC** **01 07 08**  
**MAP** MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: G.L. REVISED: 00-00-00





**PROPOSED LOCATION:  
NBU #1022-2F**

**LEGEND:**

- ⊗ DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- ⊗ WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED



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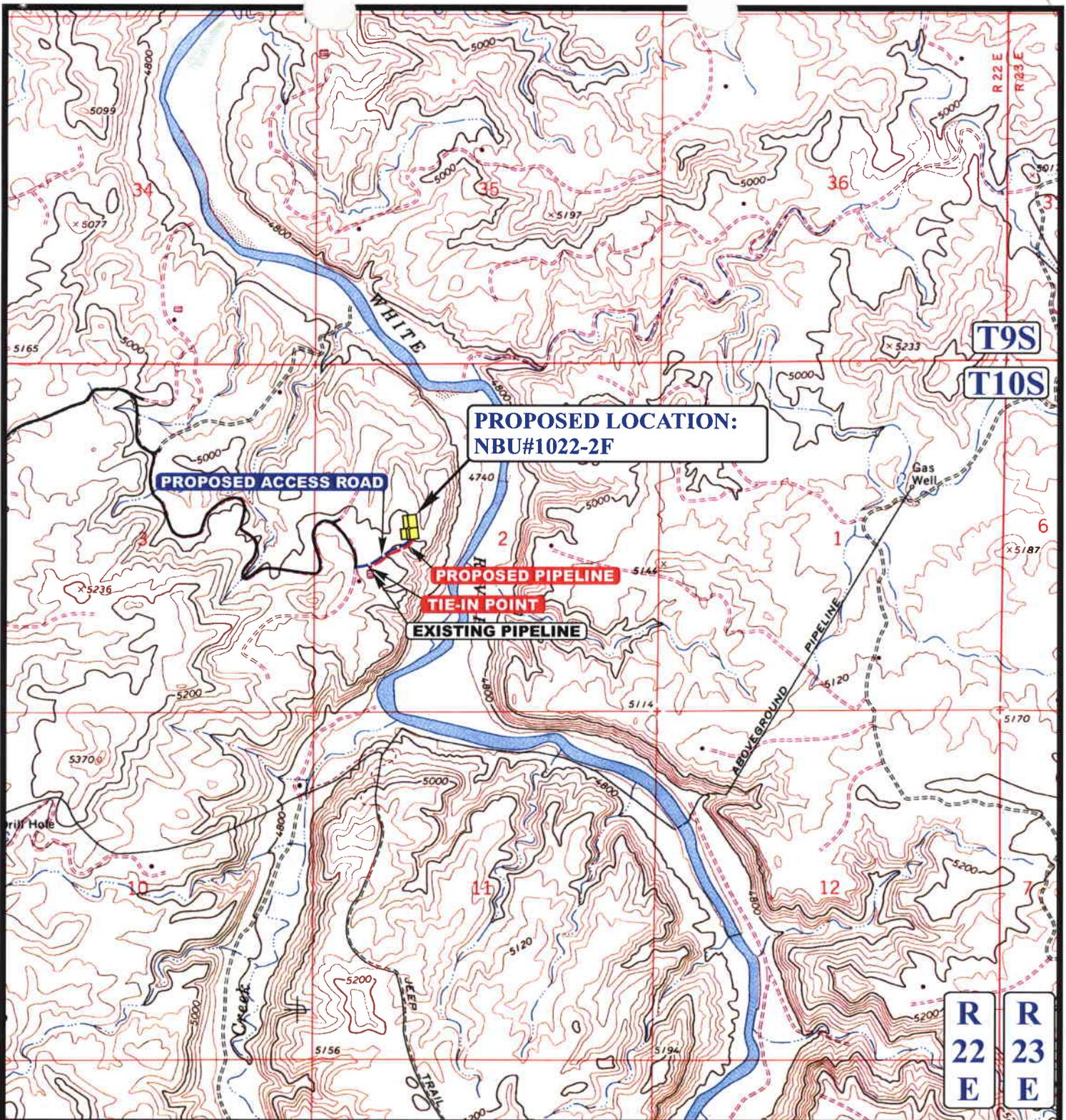


**Kerr McGee Oil & Gas Onshore LP**

**NBU #1022-2F**  
**SECTION 2, T10S, R22E, S.L.B.&M.**  
**2393' FNL 1353' FWL**

**TOPOGRAPHIC MAP** 01 07 08  
 MONTH DAY YEAR  
 SCALE: 1" = 2000' DRAWN BY: GL. REVISED: 00-00-00





**APPROXIMATE TOTAL PIPELINE DISTANCE = 768' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- - - - - PROPOSED PIPELINE
- - - - - PROPOSED PIPELINE (SERVICING OTHER WELLS)

**Kerr McGee Oil & Gas Onshore LP**

**NBU #1022-2F**  
**SECTION 2, T10S, R22E, S.L.B.&M.**  
**2393' FNL 1353' FWL**



**Utah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC MAP** **01 07 08**  
 MONTH DAY YEAR  
 SCALE: 1" = 1000' DRAWN BY: GL. REVISED: 00-00-00



# Kerr-McGee Oil & Gas Onshore LP

NBU #1022-2F

LOCATED IN UINTAH COUNTY, UTAH  
SECTION 2, T10S, R22E, S.L.B.&M.



PHOTO: VIEW OF PROPOSED PIPELINE

CAMERA ANGLE: EASTERLY



PHOTO: PIPELINE TIE IN

CAMERA ANGLE: WESTERLY



- Since 1964 -

**UELS** Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

<b>PIPELINE PHOTOS</b>	<b>01</b>	<b>07</b>	<b>08</b>	<b>PHOTO</b>
	MONTH	DAY	YEAR	
TAKEN BY: D.R.	DRAWN BY: GL.		REVISED: 00-00-00	

**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 02/26/2008

API NO. ASSIGNED: 43-047-39954

WELL NAME: NBU 1022-02F

OPERATOR: KERR-MCGEE OIL & GAS ( N2995 )

PHONE NUMBER: 720-929-6226

CONTACT: KEVIN MCINTYRE

PROPOSED LOCATION:

SENW 02 100S 220E  
 SURFACE: 2393 FNL 1353 FWL  
 BOTTOM: 2393 FNL 1353 FWL  
 COUNTY: UINTAH  
 LATITUDE: 39.97861 LONGITUDE: -109.4111  
 UTM SURF EASTINGS: 635674 NORTHINGS: 4426382  
 FIELD NAME: NATURAL BUTTES ( 630 )

INSPECT LOCATN BY: / /		
Tech Review	Initials	Date
Engineering	DKD	5/12/08
Geology		
Surface		

LEASE TYPE: 3 - State

LEASE NUMBER: ML-22651

SURFACE OWNER: 3 - State

PROPOSED FORMATION: WSMVD

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

- Plat
- Bond: Fed[] Ind[] Sta[] Fee[]  
(No. 22013542 )
- Potash (Y/N)
- Oil Shale 190-5 (B) or 190-3 or 190-13
- Water Permit  
(No. 43-8496 )
- RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )
- Fee Surf Agreement (Y/N)
- Intent to Commingle (Y/N)

LOCATION AND SITING:

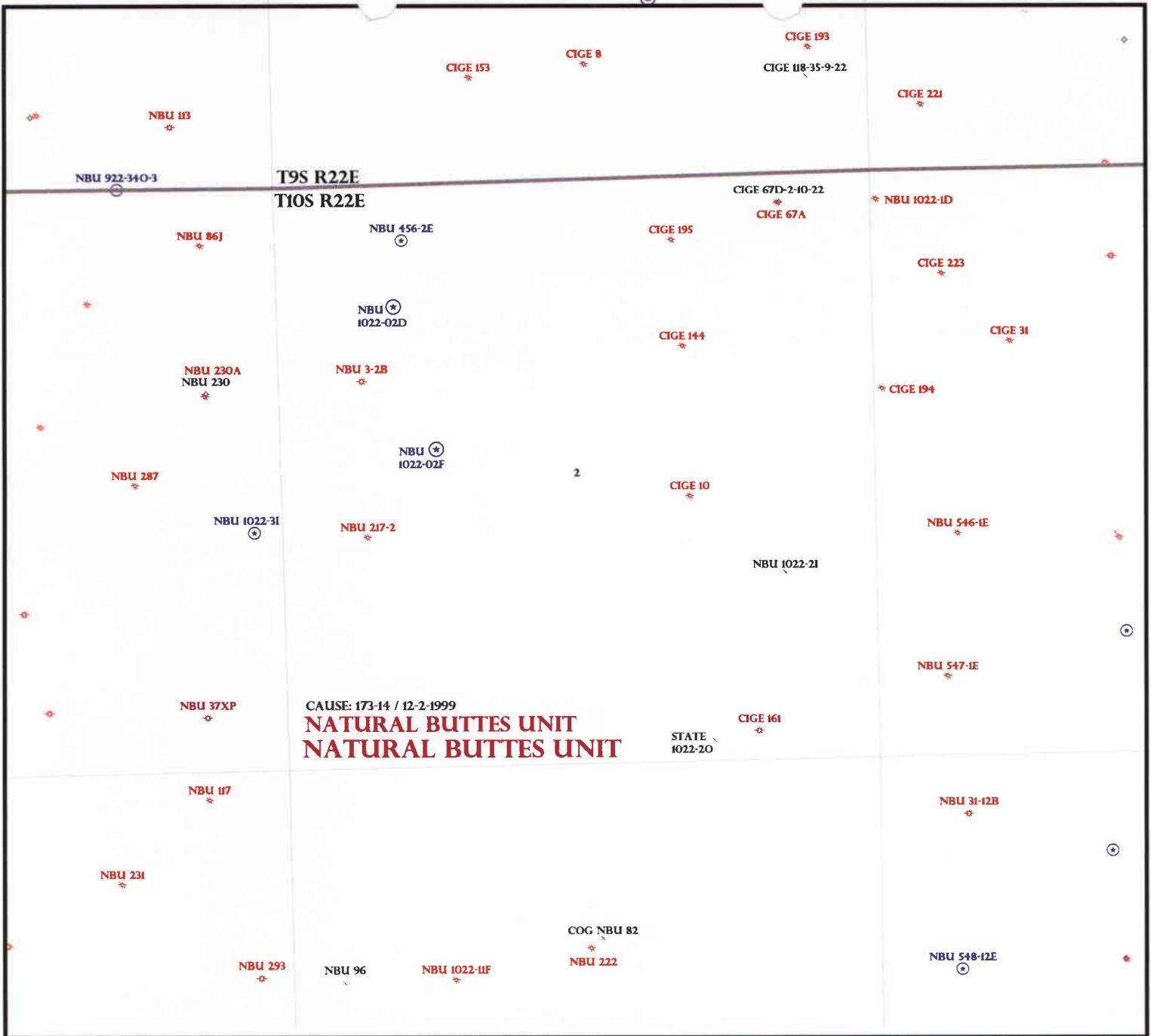
- \_\_\_\_ R649-2-3.
- Unit: NATURAL BUTTES
- \_\_\_\_ R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells
- \_\_\_\_ R649-3-3. Exception
- Drilling Unit  
Board Cause No: 173-14  
Eff Date: 12-2-1999  
Siting: 4160' fr u bdr of uncomm. Tract
- \_\_\_\_ R649-3-11. Directional Drill

COMMENTS:

Needs Permit (04-01-08)

STIPULATIONS:

- 1- STATEMENT OF BASIS
- 2- OIL SHALE
- 3- Surface (by Cont Strip



OPERATOR: KERR MCGEE O&G (N2995)

SEC: 2 T.10S R. 22E

FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

CAUSE: 173-14 / 12-2-1999



Field Status	Unit Status
ABANDONED	EXPLORATORY
ACTIVE	GAS STORAGE
COMBINED	NF PP OIL
INACTIVE	NF SECONDARY
PROPOSED	PENDING
STORAGE	PI OIL
TERMINATED	PP GAS
	PP GEOTHERML
	PP OIL
	SECONDARY
	TERMINATED

**Wells Status**

- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING

N  
W E  
S

PREPARED BY: DIANA MASON  
DATE: 27-FEBRUARY-2008

# Application for Permit to Drill

## Statement of Basis

4/9/2008

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Ownr	CBM
702	43-047-39954-00-00		GW	S	No
<b>Operator</b>	KERR-MCGEE OIL & GAS ONSHO	<b>Surface Owner-APD</b>			
<b>Well Name</b>	NBU 1022-02F	<b>Unit</b>	NATURAL BUTTES		
<b>Field</b>	NATURAL BUTTES	<b>Type of Work</b>			
<b>Location</b>	SEW 2 10S 22E S 2393 FNL 1353 FWL	GPS Coord (UTM)	635674E 4426382N		

### Geologic Statement of Basis

Kerr McGee proposes to set 2,200' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 3,300'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 2. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought up above the base of the moderately saline ground water to isolate it from fresher waters uphole.

Brad Hill  
APD Evaluator

4/9/2008  
Date / Time

### Surface Statement of Basis

The general area is in the Bitter Creek Gas Field in the southeast end of the Natural Buttes Unit. This area contains the lower Bitter Creek drainage, the White River and short rugged drainages that drain into the White River. Topography is varied consisting of narrow ridge tops, frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from ¼ mile to 2 miles. The side drainages including Bitter Creek, which joins the White River in this area, are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 39 air miles to the northwest. Access from Ouray, Utah is approximately 27.4 road miles following Utah State, Uintah County and oilfield development roads to the location. A new road 150 feet in length will be constructed to the proposed pad.

The proposed NBU 1022-02F gas well is on a ridge top which extends northerly toward the White River. To the south are higher hills with some exposed sandstone bedrock outcrops. The ridge top is narrow and breaks off into steep sided draws on both the east and west. Figure 1 of the APD shows reserve pit corner 'C' partially in fill (upper 3.9 feet). The distance from the wellhead to the reserve pit will be reduced from 58 to 40 feet. This will pull the pit into the ridge and reduce the amount in fill. A 15-foot wide bench will be constructed around the exterior of the pit. Pit spoils will also be temporarily stored along this corner. Because of the location is elevated in rough terrain above the White River a double 20-mil liner and an appropriate thickness of sub felt to cushion all rock is required for the reserve pit. The White river is about ¼ mile to the north dropping about 500 vertical feet to the river corridor. No drainages intersect the location and no diversions are needed. This appears to be a suitable location for constructing a pad, drilling and operating a well and is the only suitable site in the immediate area.

When the well is completed the storage tanks may be in view for a short distance along the river bottom. Ed Bonner of SITLA said this would be acceptable.

Both the surface and minerals for this location are owned by SITLA. Ed Bonner of SITLA attended the pre-site visit and expressed no concerns regarding the proposed location except for those discussed above.

Ben Williams represented the UDWR at the pre-site visit. He explained that the area is classified as yearlong

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# Application for Permit to Drill

## Statement of Basis

4/9/2008

Utah Division of Oil, Gas and Mining

Page 2

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critical habitat for antelope. He stated the lack of water not forage is the limiting factor affecting the herd in the area. The area along the river corridor is also classified as crucial yearlong range for deer. He did not recommend any restrictions for either species. No other wildlife is expected to be significantly affected. He gave Ed Bonner of SITLA and Rayleen White of Kerr McGee a copy of his wildlife evaluation and a UDWR recommended seed mix to be used when re-vegetating the location.

The following statement by the UDWR was previously provided for consideration in approving Permits to Drill in the White River area. "The White River in Utah is home to one of the more intact native fish assemblages in the Colorado River basin. We regularly see large adult Colorado pikeminnow (*Ptychocheilus lucius*) and all age/size classes of flannelmouth sucker (*Catostomus latipinnis*), bluehead sucker (*Catostomus discobolus*), and roundtail chub (*Gila robusta*). The pikeminnow is an endangered species covered under the ESA and managed through activities funded by the Upper Colorado River Endangered Fish Recovery Program. The remaining three species are state sensitive species covered under a Range-wide Conservation Agreement and Strategy signed by six states and numerous federal and tribal agencies and a State Management Plan for the three species also signed by state, federal, and tribal agencies. We have planned many conservation actions for the three species around the state; however, we have not worried about the White River populations as much because we still see all life stages here. If development is allowed without mitigation for potential impacts to these species, we could see a disruption in this population like we've seen in other streams and rivers across the state. Spills and/or leaks may impact these fish by a number of means, from simply causing a fish kill and harming all individuals that cannot escape the spill to interruption of spawning cues (meaning they may go one or more years depending on the severity of the spill without spawning.

Floyd Bartlett  
Onsite Evaluator

4/1/2008  
Date / Time

### Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A double synthetic liner each with a minimum thickness of 20 mils and an appropriate thickness of felt sub-liner to cushion the liners shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** KERR-MCGEE OIL & GAS ONSHO  
**Well Name** NBU 1022-02F  
**API Number** 43-047-39954-0      **APD No** 702      **Field/Unit** NATURAL BUTTES  
**Location:** 1/4,1/4 SENW      **Sec** 2      **Tw** 10S      **Rng** 22E      2393 FNL 1353 FWL  
**GPS Coord (UTM)** 635593      4426368      **Surface Owner**

### Participants

Floyd Bartlett (DOGM), Ed Bonner (SITLA), Rayleen White, Kevin McIntyre, Rammie Hoops and Tony Kzneck (Kerr McGee) and David Kay (Uintah Engineering and Land Surveying), Ben Williams (UDWR).

### Regional/Local Setting & Topography

The general area is in the Bitter Creek Gas Field in the southeast end of the Natural Buttes Unit. This area contains the lower Bitter Creek drainage, the White River and short rugged drainages that drain into the White River. Topography is varied consisting of narrow ridge tops, frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River varies from ¼ mile to 2 miles. The side drainages including Bitter Creek, which joins the White River in this area, are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. Vernal, Utah is approximately 39 air miles to the northwest. Access from Ouray, Utah is approximately 27.4 road miles following Utah State, Uintah County and oilfield development roads to the location. A new road 150 feet in length will be constructed to the proposed pad.

The proposed NBU 1022-02F gas well is on a ridge top which extends northerly toward the White River. To the south are higher hills with some exposed sandstone bedrock outcrops. The ridge top is narrow and breaks off into steep sided draws on both the east and west. Figure 1 of the APD shows reserve pit corner 'C' partially in fill (upper 3.9 feet). The distance from the wellhead to the reserve pit will be reduced from 58 to 40 feet. This will pull the pit into the ridge and reduce the amount in fill. A 15-foot wide bench will be constructed around the exterior of the pit. Pit spoils will also be temporarily stored along this corner. Because of the location is elevated in rough terrain above the White River a double 20-mil liner and an appropriate thickness of sub felt to cushion all rock is required for the reserve pit. The White river is about ¼ mile to the north dropping about 500 vertical feet to the river corridor. No drainages intersect the location and no diversions are needed. This appears to be a suitable location for constructing a pad, drilling and operating a well and is the only suitable site in the immediate area.

### Surface Use Plan

#### **Current Surface Use**

Grazing  
Recreational  
Wildlife Habitat  
Deer Winter Range

#### **New Road**

<b>Miles</b>	<b>Well Pad</b>	<b>Src Const Material</b>	<b>Surface Formation</b>
0.01	<b>Width</b> 260 <b>Length</b> 350	Onsite	UNTA

**Ancillary Facilities** N

### Waste Management Plan Adequate?

### Environmental Parameters

**Affected Floodplains and/or Wetland** N

**Flora / Fauna**

Vegetation in the area includes cheatgrass, shadscale, bud sage, black sage, Gardner saltbrush, prickly pear and spring annuals.

Deer, antelope, coyote, rabbits and other small mammals inhabit the area. Cattle may occasionally graze in the area. Various avian species are expected. No raptors are recorded in the UDWR data base in the surrounding area.

**Soil Type and Characteristics**

Surface soils are a shallow rocky sandy loam.

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diversion Required** N

**Berm Required?** N

**Erosion Sedimentation Control Required?** N

**Paleo Survey Run?** N    **Paleo Potential Observed?**    **Cultural Survey Run?** Y    **Cultural Resources?** N

**Reserve Pit**

<b>Site-Specific Factors</b>		<b>Site Ranking</b>
<b>Distance to Groundwater (feet)</b>	>200	0
<b>Distance to Surface Water (feet)</b>	>1000	0
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0
<b>Distance to Other Wells (feet)</b>	300 to 1320	10
<b>Native Soil Type</b>	Mod permeability	10
<b>Fluid Type</b>	Fresh Water	5
<b>Drill Cuttings</b>	Normal Rock	0
<b>Annual Precipitation (inches)</b>	<10	0
<b>Affected Populations</b>	<10	0
<b>Presence Nearby Utility Conduits</b>	Not Present	0
	<b>Final Score</b>	25    1 <b>Sensitivity Level</b>

**Characteristics / Requirements**

Figure 1 of the APD shows reserve pit corner 'C' partially in fill (upper 3.9 feet). The distance from the wellhead to the reserve pit will be reduced from 58 to 40 feet. This will pull the pit into the ridge and reduce the amount in fill. A 15-foot wide bench will be constructed around the exterior of the pit. Pit spoils will also be temporarily stored along this corner. Pit size is 70' x 150' x 10' deep. It is located in the southwest corner of the location.

**Closed Loop Mud Required?** N    **Liner Required?** Y    **Liner Thickness** 40    **Pit Underlayment Required?** Y

**Other Observations / Comments**

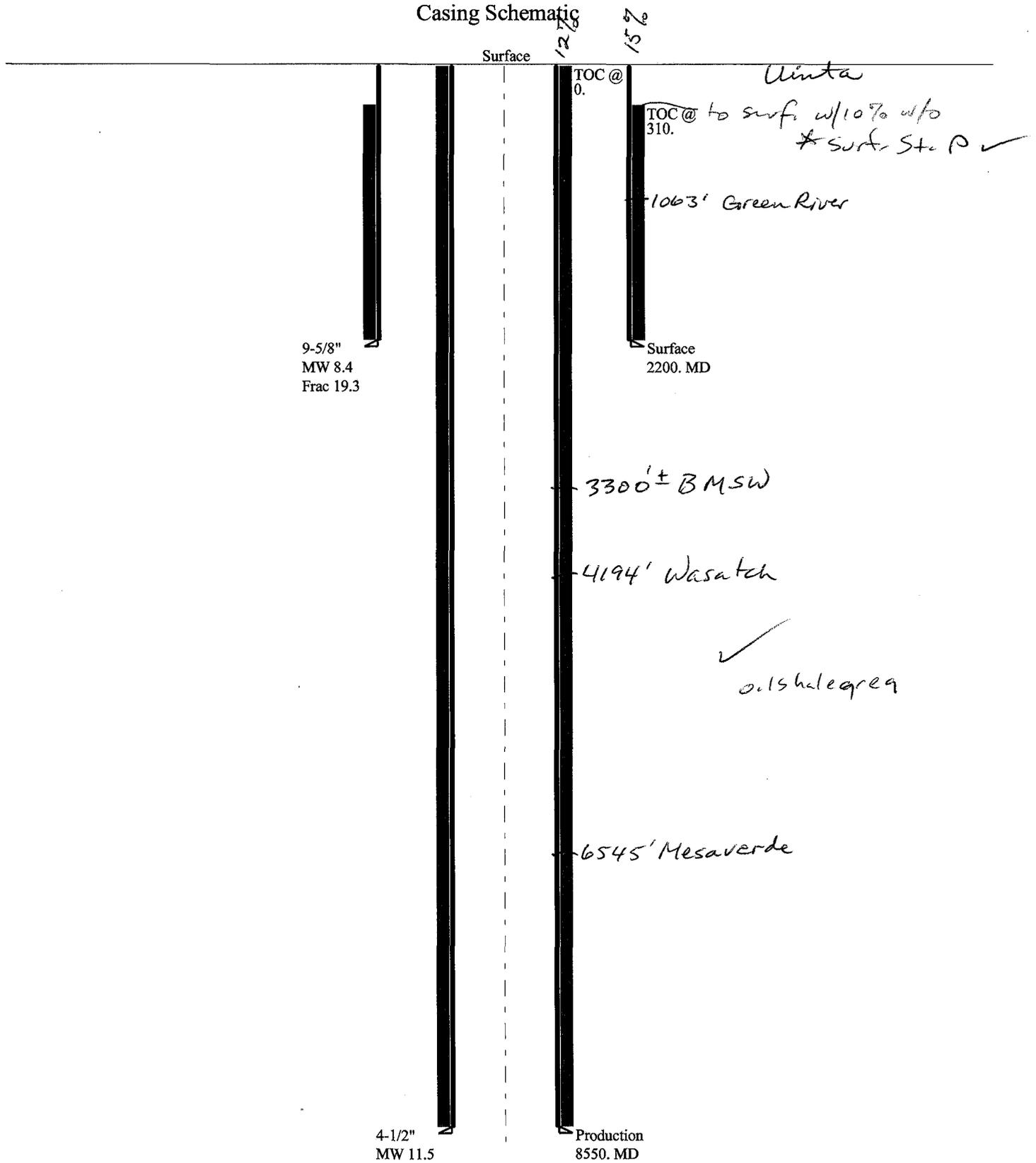
Arc was completed as part of a block survey.

Floyd Bartlett  
**Evaluator**

4/1/2008  
**Date / Time**

2008-04 Kerr McGee NBU 1022-02F

Casing Schematic



Well name:

**2008-04 Kerr McGee NBU 1022-02F**Operator: **Kerr McGee Oil & Gas Onshore L.P.**String type: **Surface**

Project ID:

**43-047-39954**Location: **Uintah County, Utah****Design parameters:****Collapse**Mud weight: 8.400 ppg  
Design is based on evacuated pipe.**Burst**Max anticipated surface  
pressure: 1,936 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 2,200 psi

No backup mud specified.

**Minimum design factors:****Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Tension:**8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Tension is based on buoyed weight.

Neutral point: 1,927 ft

**Environment:**H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 106 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,300 ft

Cement top: 310 ft

**Non-directional string.****Re subsequent strings:**Next setting depth: 8,550 ft  
Next mud weight: 11.500 ppg  
Next setting BHP: 5,108 psi  
Fracture mud wt: 19.250 ppg  
Fracture depth: 2,200 ft  
Injection pressure: 2,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2200	9.625	36.00	J-55	LT&C	2200	2200	8.796	954.9
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	960	2020	2.104	2200	3520	1.60	69	453	6.53 J

Prepared by: Helen Sadik-Macdonald  
Div of Oil, Gas & MineralsPhone: (801) 538-5357  
FAX: (801) 359-3940Date: April 15, 2008  
Salt Lake City, Utah

## Remarks:

Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop &amp; Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name:	<b>2008-04 Kerr McGee NBU 1022-02F</b>		
Operator:	<b>Kerr McGee Oil &amp; Gas Onshore L.P.</b>		
String type:	Production	Project ID:	43-047-39954
Location:	Uintah County, Utah		

**Design parameters:**

**Collapse**

Mud weight: 11.500 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 195 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,500 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 3,227 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 5,108 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

**Non-directional string.**

Tension is based on buoyed weight.  
 Neutral point: 7,080 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	8550	4.5	11.60	I-80	LT&C	8550	8550	3.875	746.1
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	5108	6360	1.245	5108	7780	1.52	82	212	2.58 J

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Minerals

Phone: (801) 538-5357  
 FAX: (801) 359-3940

Date: April 11, 2008  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 8550 ft, a mud weight of 11.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

**BOPE REVIEW**

**Kerr-McGee NBU 1022-02F API 43-047-39954**

**INPUT**

Well Name	Kerr-McGee NBU 1022-02F API 43-047-39954		
Casing Size (")	String 1	String 2	
Setting Depth (TVD)	9 5/8	4 1/2	
Previous Shoe Setting Depth (TVD)	2200	8550	
Max Mud Weight (ppg)	0	2200	
BOPE Proposed (psi)	8.4	11.5	
Casing Internal Yield (psi)	500	5000	
Operators Max Anticipated Pressure (psi)	3520	7780	
	5301	11.9 ppg	

Calculations	String 1	9 5/8 "	
Max BHP [psi]	.052*Setting Depth*MW =	961	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	697	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	477	NO ✓ <i>o.k.</i> Air Drill to surface shoe
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	477	*Can Full Expected Pressure Be Held At Previous Shoe?
Required Casing/BOPE Test Pressure		2200 psi	NO - <i>reasonable - no expected press.</i>
*Max Pressure Allowed @ Previous Casing Shoe =		0 psi	

Calculations	String 2	4 1/2 "	
Max BHP [psi]	.052*Setting Depth*MW =	5113	
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	4087	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	3232	YES
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth) =	3716	*Can Full Expected Pressure Be Held At Previous Shoe?
Required Casing/BOPE Test Pressure		5000 psi	NO <i>Reasonable</i>
*Max Pressure Allowed @ Previous Casing Shoe =		2200 psi	*Assumes 1psi/ft frac gradient

**From:** Jim Davis  
**To:** Bonner, Ed; Garrison, LaVonne; Mason, Diana  
**Date:** 10/30/2008 9:19 AM  
**Subject:** Well approvals

The following wells have been approved by SITLA, including arch and plaeo clearance.

Kerr McGEE	43-047-39954	NBU 1022-02F
Kerr McGEE	43-047-39955	NBU 1022-02D
Kerr McGEE	43-047-39959	NBU 1022-13H
Newfield Prod Co	43-013-34005	State 9-32T-8-17
Newfield Prod Co	43-047-40160	State 13-36T-8-17
Newfield Prod Co	43-047-40161	State 16-2T-9-17
Newfield Prod Co	43-013-34006	State 11-2T-9-17

-Jim

Jim Davis  
Utah Trust Lands Administration  
jimdavis1@utah.gov  
Phone: (801) 538-5156



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

**State of Utah**  
**DEPARTMENT OF NATURAL RESOURCES**

MICHAEL R. STYLER  
Executive Director

**Division of Oil, Gas and Mining**

JOHN R. BAZA  
Division Director

November 4, 2008

Kerr-McGee Oil & Gas Onshore, LP  
1099 18th St., #1200  
Denver, CO 80202

Re: NBU 1022-02F Well, 2393' FNL, 1353' FWL, SE NW, Sec. 2, T. 10 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39954.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal Field Office  
SITLA



Operator: Kerr-McGee Oil & Gas Onshore, LP  
Well Name & Number NBU 1022-02F  
API Number: 43-047-39954  
Lease: ML-22651

Location: SE NW      Sec. 2      T. 10 South      R. 22 East

### Conditions of Approval

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment – contact Dan Jarvis
- 24 hours prior to spudding the well – contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program – contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well – contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well – contact Dustin Doucet
- Any changes to the approved drilling plan – contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

- Dan Jarvis at:           (801) 538-5338 office           (801) 942-0871 home
- Carol Daniels at:       (801) 538-5284 office
- Dustin Doucet at:      (801) 538-5281 office           (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
6. In accordance with Order in Cause No. 190-5(b) dated October 28, 1982, the Operator shall comply with requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operator shall ensure that the surface and/or production casing is properly cemented over the entire oil shale interval as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the Division.
7. Surface casing shall be cemented to the surface.



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR MCGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995  
Address: 1368 SOUTH 1200 EAST  
city VERNAL  
state UT zip 84078 Phone Number: (435) 781-7024

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739954	NBU 1022-02F		SENW	2	10S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	1/18/2009			1/29/09	
Comments: MIRU PETE MARTIN BUCKET RIG. <i>WSMVD</i> SPUD WELL LOCATION ON 01/18/2009 AT 0800 HRS.							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304739955	NBU 1022-02D		NWNW	2	10S	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	99999	2900	1/17/2009			1/29/09	
Comments: <i>WSMVD</i>							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

SHEILA UPCHEGO

Name (Please Print)

Signature

REGULATORY ANALYST

Title

~~1/26/2009~~

Date

1/19/09

RECEIVED

JAN 20 2009

DIV. OF OIL, GAS & MINING

*per Sheila's email*

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

		5. LEASE DESIGNATION AND SERIAL NUMBER: ML-22651
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME: UNIT #891008900A
1. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____		8. WELL NAME and NUMBER: NBU 1022-02F
2. NAME OF OPERATOR: KERR MCGEE OIL & GAS ONSHORE LP		9. API NUMBER: 4304739954
3. ADDRESS OF OPERATOR: 1368 SOUTH 1200 EAST CITY VERNAL STATE UT ZIP 84078		10. FIELD AND POOL, OR WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2393'FNL, 1353'FWL		COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SENW 2 10S 22E		STATE: UTAH

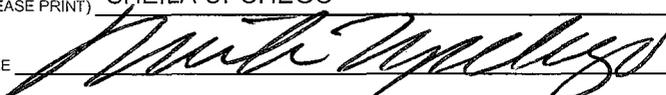
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: SET SURFACE CSG
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU PROPETRO AIR RIG ON 01/21/2009. DRILLED 12 1/4" SURFACE HOLE TO 2240'. RAN 9 5/8" 36# J-55 SURFACE CSG. CMT W/350 SX PREM CLASS G @15.8 PPG 1.15 YIELD. TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. 2ND TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. 3RD TOP OUT W/125 SX PREM CLASS G @15.8 PPG 1.15 YIELD. 4TH TOP OUT W/100 SX PREM CLASS G @15.8 PPG 1.15 YIELD. CMT TO SURFACE HOLE STAYED FULL.

WORT.

NAME (PLEASE PRINT) SHEILA UPCHEGO	TITLE REGULATORY ANALYST
SIGNATURE 	DATE 2/9/2009

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FEB 09 2009

DIV. OF OIL, GAS & MINING

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

5. LEASE DESIGNATION AND SERIAL NUMBER:  
**ML-22651**

**SUNDRY NOTICES AND REPORTS ON WELLS**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

7. UNIT or CA AGREEMENT NAME:  
**UNIT #891008900A**

1. TYPE OF WELL    OIL WELL     GAS WELL     OTHER \_\_\_\_\_

8. WELL NAME and NUMBER:  
**NBU 1022-02F**

2. NAME OF OPERATOR:  
**KERR McGEE OIL & GAS ONSHORE LP**

9. API NUMBER:  
**4304739954**

3. ADDRESS OF OPERATOR:  
**1368 SOUTH 1200 EAST    CITY VERNAL    STATE UT    ZIP 84078**

PHONE NUMBER:  
**(435) 781-7024**

10. FIELD AND POOL, OR WILDCAT:  
**NATURAL BUTTES**

4. LOCATION OF WELL  
FOOTAGES AT SURFACE: **2393'FNL, 1353'FWL**

COUNTY: **UINTAH**

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: **SENW 2 10S 22E**

STATE: **UTAH**

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARILY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLARE
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: _____	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/RESUME)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: <b>FINAL DRILLING OPERATIONS</b>
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

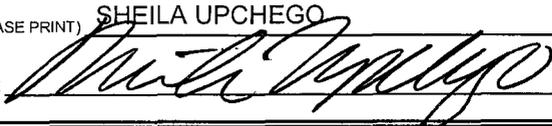
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

FINISHED DRILLING FROM 2240' TO 8705' ON 02/21/2009. RAN 4 1/2" 11.6# I-80 PRODUCTION CSG. LEAD CMT W/315 SX PREM LITE II @11.0 PPG 3.42 YIELD. TAILED CMT W/1200 SX 50/50 POZ @ 14.3 PPG 1.31 YIELD. DROP PLUG & DISPLACE W/134 BBLs OF 8.3# H2O 2515 PSI OF LIFT BUMP PLUG 2670 PSI PRESSURE UP TO 3200 PSI FLOAT HELD. 34 BBLs OF LEAD TO PIT CIRC THROUGH OUT FLUSH STACK LAY DOWN LANDING JT INSTALL WELLHEAD PACK OFF NIPPLE DOWN BOPS INSTALL NIGHT CAP AND CLEAN PITS.

RELEASED PIONEER RIG 68 ON 02/21/2009 AT 1200 HRS.

NAME (PLEASE PRINT) **SHEILA UPCHEGO**

TITLE **REGULATORY ANALYST**

SIGNATURE 

DATE **2/24/2009**

(This space for State use only)

**RECEIVED**  
**MAR 02 2009**  
**DIV. OF OIL, GAS & MINING**

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-22651
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 1022-02F
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047399540000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2393 FNL 1353 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 02 Township: 10.0S Range: 22.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

**11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input checked="" type="checkbox"/> <b>DRILLING REPORT</b> Report Date: 10/22/2009	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input checked="" type="checkbox"/> <b>PRODUCTION START OR RESUME</b>	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: _____

**12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.**  
 THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 10/22/2009 AT 10:30 A.M. PLEASE REFER TO THE ATTACHED CHRONOLOGICAL WELL HISTORY.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 November 03, 2009

<b>NAME (PLEASE PRINT)</b> Andy Lytle	<b>PHONE NUMBER</b> 720 929-6100	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A		<b>DATE</b> 10/29/2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-02F Spud Conductor: 1/18/2009 Spud Date: 1/21/2009  
 Project: UTAH-UINTAH Site: NBU 1022-02F Rig Name No: PROPETRO/, PIONEER 68/68  
 Event: DRILLING Start Date: 1/19/2009 End Date: 2/22/2009  
 Active Datum: RKB @5,035.00ft (above Mean Sea Level) UWI: 0/10/S/22/E/2/0/SENW/6/PM/N/2,393.00/W/0/1,353.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
1/21/2009	14:00 - 0:00	10.00	DRLSUR	02		P		DRILL F/ 40' TO 660' W/ HAMMMER BIT (NO WATER)
1/22/2009	0:00 - 12:00	12.00	DRLSUR	02		P		DRILL F/ 660' TO 1020' WITH HAMMER BIT (WATER @ 1010') TRIP FOR BIT.
	12:00 - 0:00	12.00	DRLSUR	02		P		DRILL F/ 1020' TO 1380'.(SURVEY 3/4 DEGREES @ 1200') (WATER @ 1340')
1/23/2009	0:00 - 12:00	12.00	DRLSUR	02		P		DRILL F/ 1380' TO 1660' ( CIRC W/ SKID PUMP TO CONTROL WATER GAIN FROM 1340') SURVEY @ 1620'= 2.5 DEGREES. REDUCE WT ON BIT TO 25 K.
	12:00 - 0:00	12.00	DRLSUR	02		P		DRILL F/ 1660' TO 1800' (CIRC W/ SKID PUMP TO CONTROL WATER GAIN.) DRILL W/ REDUCED WOB 25K. SURVEY @ 1800'= 2 DEGREES.
1/24/2009	0:00 - 12:00	12.00	DRLSUR	02		P		DRILL F/ 1800' TO 1950' CONTROLLING WATER GAIN W/ SKID PUMP. ONLY ABLE TO CIRC W/ AIR.
	12:00 - 0:00	12.00	DRLSUR	02		P		DRILL F/ 1950' TO 2160' CONTROLLING WATER GAIN W/ SKID PUMP. ONLY ABLE TO CIRC W/ AIR.
1/25/2009	0:00 - 8:00	8.00	DRLSUR	02		P		DRILL F/ 2160' TO 2240' TD 08:00 1/25/2009. CONTROLLING FLUID GAIN W. SKID PUMP
	8:00 - 18:00	10.00	DRLSUR	06		P		HOLE STICKY, BLOW HOLE DRY W/ AIR. LDDS, RUN 50 JTS OF 9 5/8" 36# J-55 SURFACE.CSG TO 2163'.
	18:00 - 0:00	6.00	DRLSUR	12		P		PUMP 350 SX OF 2 % CAL CEM 15.8# 1.15YD, 5 GAL/SK 130 PSI LIFT, BUMP PLUG FLOAT HELD. NO CEMENT TO SURFACE. PUMP TOP OUT #1 100 SX 4% CEMENT(20 BBLs) 15.8# 1.15YD, 5 GAL/SK, WAIT 1.5 HRS, PUMP TOP OUT #2 100 SX. PUMP TOP OUT #3 125 SX. PUMP TOP OUT #4 100 SX ALL TOP OUT 15.8# 4 % CAL, 1.15 YD, 5 GAL SX. (CEMENT TO SURFACE AND STAYED)
2/13/2009	22:30 - 0:00	1.50	DRLPRO	01	E	P		RDRT TO MOVE TO NBU 1022-02F
2/14/2009	0:00 - 7:30	7.50	DRLPRO	01	E	P		RDRT
	7:30 - 18:30	11.00	DRLPRO	01	A	P		MOVE RIG TO NBU 1022-02F. L & S RELEASED @ 17:30 4 BED-8 HAUL-2 FORKLIFTS-3 SWAMPERS-1 PUSHER. J & C CRANE RELEASED @ 18:30 RAISED DERRICK OFF CARRIER,SCOPED SUB,HYDRAULIC PROBLEMS,WAIT ON DAYLIGHT TO SCOPE DERRICK.
	18:30 - 0:00	5.50	DRLPRO	01	B	P		RIGGING UP
2/15/2009	0:00 - 21:00	21.00	DRLPRO	01	B	P		RURT,SCOPE DERRICK & RESTRING DERRICK & BLOCKS W/ NEW DRILL LINE. FINISH RIG UP.
	21:00 - 0:00	3.00	DRLPRO	14	A	P		( HELD SAFETY MEETING ) NIPPLE UP BOP
2/16/2009	0:00 - 2:00	2.00	DRLPRO	14	A	P		NIPPLE UP BOP
	2:00 - 12:00	10.00	DRLPRO	15	A	P		( HELD SAFETY MEETING W/ B&C QUICKTEST ) RIG UP EQUIPMENT & TEST PIPE RAMS,BLIND RAMS,CHOKE & ALL FLOOR RELATED 250 PSI LOW TO 5000 PSI HIGH. TEST HYDRIL 250 PSI LOW TO 2500 PSI HIGH, TEST CSG TO 1500 PSI & HOLD 30 MIN. MISC LEAKS ON BOP & B&C QUICK TEST LINE, KOOMEY LINE HOOKED UP WRONG. WAIT ON KILL LINE CHECK VALVE,REINSTALL & TEST 250 LOW TO 5000 HIGH.

**RECEIVED** October 29, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-02F		Spud Conductor: 1/18/2009	Spud Date: 1/21/2009
Project: UTAH-UINTAH		Site: NBU 1022-02F	Rig Name No: PROPETRO/, PIONEER 68/68
Event: DRILLING		Start Date: 1/19/2009	End Date: 2/22/2009
Active Datum: RKB @5,035.00ft (above Mean Sea Level)		UWI: 0/10/S/22/E/2/O/SENW/6/PM/N/2,393.00/W/0/1,353.00/O/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	12:00 - 16:00	4.00	DRLPRO	06	A	P		( HELD 30 MIN SAFETY MEETING W/ WEATHERFORD TRS ) RIG UP WEATHERFORD & PICK UP BHA & 42 JTS DP TO 2008'. RIG DOWN WEATHERFORD.
	16:00 - 17:00	1.00	DRLPRO	11	E	P		INSTALL ROTATING HEAD & DO PRE SPUD RIG INSPECTION.
	17:00 - 18:30	1.50	DRLPRO	02	F	P		DRILL CMT & FLOAT EQUIPMENT & 80' PRE DRILLED HOLE TO 2258' ROTARY SPUD @ 18:30 02/16/2009 CMT TOP 2098', FLOAT 2136', SHOE 2178'
	18:30 - 19:00	0.50	DRLPRO	02	B	P		DRILL 2258' 2303' 45'=90 FPH, WOB 16,ROT 50, SPM 125, GPM 473, MOTOR RPM 76, SPP ON/OFF 1530/1330, P/U-S/O-ROT 80/70/75, DIFF 125, MW 8.3, VIS 26
	19:00 - 19:30	0.50	DRLPRO	10	A	P		SURVEY @ 2228' 1.16 DEG
	19:30 - 20:00	0.50	DRLPRO	07	A	P		RIG SERVICE
	20:00 - 0:00	4.00	DRLPRO	02	B	P		DRILL 2303' - 2872'. 569'=142.25 FPH, WOB 17,ROT 50, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 1500/1300, P/U-S/O-ROT 100/95/98, DIFF 200, MW 8.4, VIS 29
2/17/2009	0:00 - 3:00	3.00	DRLPRO	02	B	P		DRILL 2872'-3316' 444'=148.0 FPH, WOB 17,ROT 50, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 1920/1630, P/U-S/O-ROT 100/95/98, DIFF 210, MW 8.5, 29
	3:00 - 3:30	0.50	DRLPRO	10	A	P		SURVEY @ 3241' 1.82 DEG
	3:30 - 10:30	7.00	DRLPRO	02	B	P		DRILL 3316'- 4327' (1011'=144'/HR, WOB 17,ROT 50, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 2000/1750, P/U-S/O-ROT 108,98,105 DIFF 250, MW 9#, 30
	10:30 - 11:00	0.50	DRLPRO	10	A	P		SURVEY 4252' = 1.91 DEG.
	11:00 - 12:30	1.50	DRLPRO	02	B	P		DRILL 4327'- 4548, 221'=147'/HR, WOB 17,ROT 50, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 2000/1750, P/U-S/O-ROT 108,98,105 DIFF 250, MW 9.2, 30
	12:30 - 13:00	0.50	DRLPRO	07	A	P		RIG SERVICE. FUNCTION BOP'S.
	13:00 - 20:00	7.00	DRLPRO	02	B	P		DRILL 4548' -5399' 851'= 121'/HR WOB 18,ROT 50, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 2200/1950, P/U-S/O-ROT 108,98,105 DIFF 250, MW 9.5, 34
	20:00 - 20:30	0.50	DRLPRO	10	A	P		SURVEY 5324'= 2.08 DEGREES
	20:30 - 22:30	2.00	DRLPRO	02	B	P		DRILL F/ 5399' TO 5579', 180 = 90'/HR WOB 18,ROT 50, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 2200/1950, P/U-S/O-ROT 108,98,105 DIFF 250, MW 9.6, 34
	22:30 - 23:30	1.00	DRLPRO	22	G	X		LOSS CIRC 5579' 9.6 MUD WT 34 VIS, SHUT DOWN CIRC, WORK PIPE, BUILD 25% LCM SWEEP, PUMP SWEEP, REGAIN CIRC, RAISE LCM TO 3% THROUGHOUT PIT. LOSS TOTAL OF 120 BBLs. REGAINED CIRC.
	23:30 - 0:00	0.50	DRLPRO	02	B	P		DRILL 5579'-5630', 51'= 102'/HR, WOB 18,ROT 50, SPM 115, GPM 435, MOTOR RPM 70, SP ON/OFF 2000/1750, P/U-S/O-ROT 110,100,107 DIFF 250, MW 9.6, 34, 3% SLIGHT SEEPAGE.
2/18/2009	0:00 - 12:00	12.00	DRLPRO	02	B	P		DRILL 5630'-6379', 749=62'/HR, WOB 20,ROT 50, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 2300/2050, P/U-S/O-ROT 145,125,140 DIFF 250, MW 9.8, 38, 5%
	12:00 - 12:30	0.50	DRLPRO	07	A	P		RIG SERVICE , FUNCTION BOP'S
	12:30 - 13:00	0.50	DRLPRO	22	G	X		WELL STARTED TAKING 31 BBL HR @ 6379'. START INCREASING LCM % TO 8%. PROCEED W/ DRILLING.

**RECEIVED** October 29, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-02F	Spud Conductor: 1/18/2009	Spud Date: 1/21/2009
Project: UTAH-UINTAH	Site: NBU 1022-02F	Rig Name No: PROPETRO/, PIONEER 68/68
Event: DRILLING	Start Date: 1/19/2009	End Date: 2/22/2009
Active Datum: RKB @5,035.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/SENW/6/PM/N/2,393.00/W/0/1,353.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	13:00 - 17:30	4.50	DRLPRO	02	B	P		DRILL 6379' TO 6631' 252'= 56'/HR WOB 20,ROT 50, SPM 115, GPM 434, MOTOR RPM 70, SP ON/OFF 2100/1950, P/U-S/O-ROT 153,141,148 DIFF 250, MW 9.9, 38, 11%. WELL SEEPING W/ 8% LCM INCREASE LCM TO 11% TILL WELL HEALED WHILE DRILLING.
	17:30 - 18:00	0.50	DRLPRO	10	A	P		SURVEY 6565'= 1.98 DEGREES
	18:00 - 0:00	6.00	DRLPRO	02	B	P		DRILL 6631'-7042' 411'= 68'/HR WOB 20,ROT 45, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 2300/2050, P/U-S/O-ROT 160,138,150 DIFF 250, MW 10.3, 38, 14%. INCREASED LCM TO 14% DUE TO SEEPAGE.
2/19/2009	0:00 - 12:00	12.00	DRLPRO	02	B	P		DRILL 7042' TO 7611' 569'= 47'/HR WOB 20,ROT 50, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 2300/2050, P/U-S/O-ROT 170, 158, 168 DIFF 250, MW 10.4, 40, 14%
	12:00 - 12:30	0.50	DRLPRO	07	A	P		RIG SERVICE, FUNCTION BOP'S, CLEAN SAND TRAP.
	12:30 - 13:00	0.50	DRLPRO	02	B	P		DRILL 7611' TO 7643', LOSS ALL CIRC. 10.4 WT 40 VIS 14% LCM.
	13:00 - 14:30	1.50	DRLPRO	22	G	X		LOSS ALL CIRC. RAISE LCM 18% REGAIN CIRC. TRANSFER 300 BBL'S OF STORAGE MUD TO STEEL PITS. LOSSES CONTAINED.
	14:30 - 20:30	6.00	DRLPRO	02	B	P		DRILL 7643' TO 7818' (175', 29'/HR) BIT SLOWED TO LESS THEN 10' PER HR. WOB 12-28K ,ROT 40-50, SPM 125, GPM 473, MOTOR RPM 76, SP ON/OFF 2450/2150, P/U-S/O-ROT 172, 160, 170 DIFF 250, MW 10.8, 41, 18%
	20:30 - 21:30	1.00	DRLPRO	05	C	P		CIRC AND COND. MIX DRY 12.5# 40 BBL DRY JOB. CIRC BOTTOMS UP AND PUMP DRY JOB, DROP SURVEY.
	21:30 - 0:00	2.50	DRLPRO	06	A	P		TRIP OUT OF HOLE W/ BIT #1, WORK OUT TIGHT HOLE 7810'- 7815'.
2/20/2009	0:00 - 4:30	4.50	DRLPRO	06	A	P		TRIP OUT OF HOLE W/ BIT #3, 20K DRAG 4600 TO 4540' TRIP OUT, LAY DOWN DRILLING JARS AND IBS. INSPECT MOTOR RETRIEVE SURVEY 7700'= 1.65 DEGREES
	4:30 - 10:30	6.00	DRLPRO	06	A	P		MAKE UP BIT #2 AND TRIP IN HOLE, FILL PIPE @ 2300', 6400'. NO TIGHT HOLE ON TRIP IN. NO LOSSES THROUGH OUT TRIP. NO GAIN.
	10:30 - 14:30	4.00	DRLPRO	02	B	P		DRILL 7818'- 7985' (167'= 41'/HR) WOB18,ROT 50, SPM 120, GPM 454, MOTOR RPM 70, SP ON/OFF 2300/2050, P/U-S/O-ROT 173, 165, 164 DIFF 250, MW 11.2, 42, 18% TRIP GAS= 6000u W/ 6' FLARE
	14:30 - 15:00	0.50	DRLPRO	07	A	P		RIG SERVICE, FUNCTION BOP'S.
	15:00 - 0:00	9.00	DRLPRO	02	B	P		DRILL 7985'- 8460', 475'= 52'/HR WOB 18,ROT 50, SPM 120, GPM 454, MOTOR RPM 70, SP ON/OFF 2350/2050, P/U-S/O-ROT 185, 160, 175 DIFF 250, MW 11.3, 42, 18%
2/21/2009	0:00 - 4:00	4.00	DRLPRO	02	B	P		DRILL 8460'- 8705' (245'= 61'/HR) WOB 18,ROT 50, SPM 120, GPM 454, MOTOR RPM 70, SP ON/OFF 2350/2050, P/U-S/O-ROT 185, 160, 175 DIFF 250, MW 11.4, 42, 18% DRILLING W/ 0-4' FLARE.
	4:00 - 5:00	1.00	DRLPRO	05	C	P		CIRC. BOTTOMS UP. BG= 2000u NO WELL FLOW. MIX AND PUMP 30 BBL 12.5# PILL TO DRY PIPE.
	5:00 - 6:00	1.00	DRLPRO	06	E	P		SHORT TRIP TO 7700', NO FLOW.
	6:00 - 8:00	2.00	DRLPRO	05	A	P		CIRC 2 CIRC.SHORT TRIP GAS= 7175u W/ 8' FLARE. HOLD SAFETY MEETING W/ TESCO WIRE LINE. RIG UP TESCO. MIX AND PUMP 85 BBL 13.5# PILL AND PUMP. DROP SURVEY.

**RECEIVED** October 29, 2009

**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-02F      Spud Conductor: 1/18/2009      Spud Date: 1/21/2009  
 Project: UTAH-UINTAH      Site: NBU 1022-02F      Rig Name No: PROPETRO/, PIONEER 68/68  
 Event: DRILLING      Start Date: 1/19/2009      End Date: 2/22/2009  
 Active Datum: RKB @5,035.00ft (above Mean Sea Level)      UWI: 0/10/S/22/E/2/0/SENW/6/PM/N/2,393.00/W/0/1,353.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	8:00 - 16:30	8.50	PROD	06	A	P		LAY DOWN DRILL PIPE, FILL BACKSIDE W/ 11.8# MUD WHILE TRIPPING OUT. NO TIGHT HOLE, BREAK KELLY. LAY DOWN BHA. SURVEY 8500' 1.45 DEGREES
	16:30 - 17:00	0.50	PROD	14	B	P		PULL WEAR RING. MOVE TESCO OFF CAT WALK.
	17:00 - 20:00	3.00	EVALPR	11	D	P		HOLD SAFETY MEETING W/ HALIBURTON LOGGERS. RIG UP HALIBURTON. RUN TRIPLE COMBO. BRIDGE OUT @ 4525'. BRIDGE SOLID. LOG OUT. HOLE STARTED FLOWING. RIG DOWN LOGGERS.
	20:00 - 20:30	0.50	CSG	12	A	P		HOLD SAFETY MEETING W/ TESCO. RIG UP CSG CREW.
	20:30 - 0:00	3.50	CSG	12	C	P		RUN 4.5" I-80 11.6# CSG. INSTALL ROT RUBBER AND CIRC OUT GAS @ 1500', 15' FLARE. CONTINUE RUNNING CSG TO 4500' AND CIRC OUT GAS. 15' FLARE.
2/22/2009	0:00 - 3:30	3.50	CSG	12	C	P		RUN IN CSG AND TAG BOTTOM 8705', LD TAG JT AND PICK UP LANDING MANDREL. LAND CSG SHOE @ 8700', FLOAT @ 8658', WASATCH MARKER JT @ 4209'. RUN 206 JTS OF 4.5" I-80 11.6# CSG. 4' FLARE ON TRIP IN.
	3:30 - 5:30	2.00	CSG	05	D	P		RIG DOWN CSG CREW, INSTALL ROT. HEAD RUBBER, INSTALL ROT HEAD, CIRC OUT GAS 15-20' FLARE ON BOTTOMS UP. HOLD SAFETY MEETING W/ BJ SERVICES. READY FOR CEMENT.
	5:30 - 8:30	3.00	CSG	12	E	P		PRESSURE TEST LINES TO 4500 PSI. START PUMPING 20 BBLS OF MUD CLEAN, PUMP 20 SX (30 BBLS) OF 9.5# 8.55 YD, 58.8 GAL/SK SCAVENGER. PUMP 315 SX (192 BBLS) OF 11# 3.42 YD, 20.8 GAL/SK LEAD HI-FILL CEMENT. PUMP 1200 SX (280 BBLS) OF 14.3# 1.31 YD 5.9 GAL/SK OF TAIL 50/50 POZ. DROP PLUG AND DISPLACE W/ 134 BBLS OF 8.3# H2O. 2515 PSI OF LIFT, BUMP PLUG 2670 PSI, PRESSURE UP TO 3200 PSI. FLOAT HELD. 34 BBLS OF LEAD TO PIT. CIRC THROUGH OUT. RIG DOWN CEMENTERS.
	8:30 - 13:00	4.50	RDMO	14	A	P		FLUSH STACK LAY DOWN LANDING JT, INSTALL WELL HEAD PACK OFF, NIPPLE DOWN BOP'S, INSTALL NIGHT CAP AND CLEAN PITS. RIG RELEASE 13:00 2/21/2009
3/3/2009	-	-						

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**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-02F	Spud Conductor: 1/18/2009	Spud Date: 1/21/2009
Project: UTAH-UINTAH	Site: NBU 1022-02F	Rig Name No: LEED 698/698
Event: COMPLETION	Start Date: 10/19/2009	End Date: 10/20/2009
Active Datum: RKB @5,035.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/SENW/6/PM/N/2,393.00/W/0/1,353.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
3/3/2009	-							
10/15/2009	7:00 - 7:15	0.25		48				JSA PU PIPE SAFETY
	7:15 - 17:00	9.75	COMP	30		P		RU RIG ND WELLHEAD NU BOPS TEST TO 3000# PU & TALLEY PIPE RIH TAG @ 8655' W/ 275 JNTS POOH ND BOPS NU FRAC VALVES PREP TO TEST IN AM SDFN
10/16/2009	7:00 - 7:15	0.25		48				JSA W/L SAFETY
	7:15 - 15:00	7.75	COMP	30		P		NU TESTERS TEST CASING & FRAC VALVES TO 7500# GOOD TEST RU W/L RIH W/ PERF GUN SHOOT @
								STAGE #1] RIH W/ CASED HOLE SOLUTIONS PERF GUN, PERF MESA VERDE USING 3-3/8" EXPEND, 23 GRM, 0.36" HOLE 8598'-8602' 2 SPF, 120* PH, 12 HOLES 8482'-8486' 4 SPF, 90 PH, 16 HOLES 8436'-8439' 3 SPF, 120* PH, 9 HOLES 8374'-8376' 3 SPF, 120* PH, 6 HOLES SDFW.
10/19/2009	7:00 - 7:30	0.50	COMP	48		P		JSA- FRAC AND PERF

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**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-02F      Spud Conductor: 1/18/2009      Spud Date: 1/21/2009  
 Project: UTAH-UINTAH      Site: NBU 1022-02F      Rig Name No: LEED 698/698  
 Event: COMPLETION      Start Date: 10/19/2009      End Date: 10/20/2009  
 Active Datum: RKB @5,035.00ft (above Mean Sea Level)      UWI: 0/10/S/22/E/2/O/SENW/6/PM/N/2,393.00/W/O/1,353.00/O/O

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	7:30 - 19:30	12.00	COMP	36	B			<p>PRES TEST SURFACE LINES TO 8500 PSI. GOOD.</p> <p>STAGE #1- OPEN WELL- SICP 1690 PSI. BRK 3737 PSI AT 2.9 BPM, ISIP 2772, FG .76. PMP PAD, 52.1 BPM @ 5760 PSI = 100% PERFS OPEN.</p> <p>MP 6410, MR 53.6, AP 5072, AR 52.4, FG .74, ISIP 2583, NPI -189.</p> <p>BBLS PMP 2607 SLK WTR, 91,682# 30/50 AND 5,000# 40/20 RESIN (TOT PROP 96,687#)</p> <hr/> <p>STAGE #2- PU 4-1/2" HALCO 8K CBP AND 3-1/8" EXP GUNS, 23 GM, .36 HOLES ON 120* PHASING AND 90* PHASING.</p> <p>SET CBP AT 8332'. PULL UP AND PERF 8298-8302 (4 SPF), 8252-54 (3 SPF), 8216-18 (3 SPF), 8166-68 (4 SPF), 8138-40 (3 SPF). 42 HOLES TOTAL.</p> <p>OPEN WELL- SICP 1260 PSI. BRK 3883 PSI AT 3.2 BPM, ISIP 2608, FG .75.</p> <p>PMP PAD, 50.1 BPM @ 5414 PSI = 100% PERFS OPEN.</p> <p>MP 7543, MR 51.5, AP 5014, AR 50.6, FG .75, ISIP 2641, NPI 33.</p> <p>BBLS PMP 2271 SLK WTR, 78,457# 30/50 AND 2,500# 40/20 RESIN (TOT PROP 80,957#)</p> <p>NOTE: SCREENED OFF- ONLY GOT 78,457# 30/50 SAND INTO FORMATION.</p> <p>FLOW BACK THEN REFLUSH W/ 126.5 BBL W/ HCL AND SCALE INHIB AS PER PROCEEDURE.</p> <hr/> <p>STAGE #3- PU 4-1/2" HALCO 8K CBP AND 3-1/8" EXP GUNS, 23 GM, .36 HOLES ON 180*, 120*, AND 90* PHASING</p> <p>SET CBP AT 8058'. PULL UP AND PERF 8026-28' (4 SPF), 7962-64' (4 SPF), 7882-86 (3 SPF), 7852-54 (2 SPF), 7738-40' (4 SPF). 40 HOLES TOTAL.</p> <p>OPEN WELL- SICP 1830 PSI. BRK 3608 PSI AT 3.4 BPM, ISIP 2521, FG .75.</p> <p>PMP PAD, 40 BPM @ 4100 PSI = 100% PERFS OPEN.</p> <p>MP 5625, MR 53.4, AP 4289, AR 50.3, FG .77, ISIP 2637, NPI 116.</p> <p>BBLS PMP 2500 SLK WTR, 84,449# 30/50 AND 6,100# 40/20 RESIN (TOT PROP 90,599#)</p> <p>NOTE: CUT SAND 10,000# SHORT AS PRESSURE CLIMBED. DID GET FLUSHED.</p> <hr/> <p>STAGE #4- PU 4-1/2 HALCO 8K CBP AND 3-1/8" EXP GUNS, 23 GM, .36 HOLES ON 90* AND 120* PHASING</p> <p>SET CBP AT 7678'. PULL UP AND PERF 7645-48' (4 SPF), 7604-06' (3 SPF), 7571-74' (4 SPF), 7526-28' (3 SPF), 7444-46' (3 SPF), 42 HOLES TOTAL.</p> <p>OPEN WELL- SICP 1676 PSI. BRK 3652 PSI AT 3.2 BPM, ISIP 1805, FG .67.</p> <p>PMP PAD, 50.2 BPM @ 5429 PSI = 100% PERFS</p>

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**US ROCKIES REGION  
Operation Summary Report**

Well: NBU 1022-02F      Spud Conductor: 1/18/2009      Spud Date: 1/21/2009  
 Project: UTAH-UINTAH      Site: NBU 1022-02F      Rig Name No: LEED 698/698  
 Event: COMPLETION      Start Date: 10/19/2009      End Date: 10/20/2009  
 Active Datum: RKB @5,035.00ft (above Mean Sea Level)      UWI: 0/10/S/22/E/2/0/SENW/6/PM/N/2,393.00/W/0/1,353.00/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
								OPEN. MP 6183, MR 52.3, AP 4396, AR 51.3, FG .72, ISIP 2164, NPI 359. BBLS PMP 3104 SLK WTR, 122,867# 30/50 AND 6,000# 40/20 RESIN (TOT PROP 128,867#) NOTE: PUMP EXTRA SAND FROM STG 3. ----- RIH W/ 8K HALCO CBP AND SET KILL PLUG AT 7384'. ----- RD CASEDHOLE AND SUPERIOR WELL SERVICES. SDFN. TOTAL FLUID PMP 10,491 BBLS, TOTAL PROP PMP 394,610#. JSA- ND/NU. ND FRAC VALVES. NU BOP. RU FLOOR AND TBG EQUIP. MU 3-7/8" BIT, POBS, AND 1.87" XN-NIPPLE AND RIH ON JTS 2-3/8" J-55 TBG. TAG SAND AT ' RU DRLG EQUIP. EST CIRC. D/O PLUGS. ----- #1- C/O 20' SAND TO CBP AT 7384'. D/O IN 8 MIN. 200# INC. RIH #2- C/O 30' SAND TO CBP AT 7678'. D/O IN 9 MIN. 200# INC. RIH #3- C/O 30' SAND TO CBP AT 8058'. D/O IN 6 MIN. 100# INC. RIH #4- C/O 30' SAND TO CBP AT 8332'. D/O IN 9 MIN. 50# INC. RIH PBTD- C/O 46' SAND TO PBTS AT 8655' W/ 275 JTS IN. ----- CIRC CLEAN. RD PWR SWIVEL. POOH AS LD 18-JTS 2-3/8" TBG. PU 4" 10K FMC HANGER. LUB IN AND LAND 257-JTS 2-3/8" J-55 TBG W/ EOT AT 8112.27'. DROP BALL. RD FLOOR. ND BOP. NU WH. HOOK UP PMP TO TBG. RELEASE BIT SUB AT 2700#. SHUT WELL IN. RACK OUT EQUIP. RDSU. TURN WELL OVER TO FLOW BACK CREW. ROAD RIG TO NBU 922-18K1BS. SDFN. ----- TBG DETAIL      KB      18.00 PMP 10,491 BBL 4" 10K FMC HANGER      .83 RCVR 2300 BBL 257-JTS 2-3/8" J-55 TBG      8091.24 LTR 8191 BBL 1.87" XN-NIPPLE (FE)      2.20 284-JTS DELIVERED EOT      8112.27 26-JTS RETURNED ----- 1-JT BAD PIN 7 AM FLBK REPORT: CP 1900#, TP 2050#, 20/64" CK,45 BWPB, HEAVY SAND, LIGHT GAS TTL BBLS RECOVERED: 3245 BBLS LEFT TO RECOVER: 7246 ----- 7 AM FLBK REPORT: CP 2900#, TP2625#, 20/64" CK, 30 BWPB, HEAVY SAND, MED GAS TTL BBLS RECOVERED: 4135 BBLS LEFT TO RECOVER: 6356
10/20/2009	7:00 - 7:30	0.50	COMP	48		P		
	7:30 - 18:00	10.50	COMP	44	C	P		
10/21/2009	7:00 -			33	A			
10/22/2009	7:00 -			33	A			

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**US ROCKIES REGION**  
**Operation Summary Report**

Well: NBU 1022-02F	Spud Conductor: 1/18/2009	Spud Date: 1/21/2009
Project: UTAH-UINTAH	Site: NBU 1022-02F	Rig Name No: LEED 698/698
Event: COMPLETION	Start Date: 10/19/2009	End Date: 10/20/2009
Active Datum: RKB @5,035.00ft (above Mean Sea Level)	UWI: 0/10/S/22/E/2/0/SENW/6/PM/N/2,393.00/W/0/1,353.00/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
	10:30 -		PROD	50				WELL TURNED TO SALE @ 1030 HR ON 10/22/09 - FTP 2350#, CP 2800#, 2400 MCFD, 30 BWPD, 16/64 CK
10/23/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 3550#, TP 2775#, 16/64" CK, 25 BWPH, MEDIUM SAND, - GAS TTL BBLs RECOVERED: 4760 BBLs LEFT TO RECOVER: 5731
10/24/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 3425#, TP 2675#, 16/64" CK, 15 BWPH, LIGHT SAND, - GAS TTL BBLs RECOVERED: 5182 BBLs LEFT TO RECOVER: 5309
10/25/2009	7:00 -			33	A			7 AM FLBK REPORT: CP 3300#, TP 2550#, 16/64" CK, 12 BWPH, TRACE SAND, - GAS TTL BBLs RECOVERED: 5533 BBLs LEFT TO RECOVER: 4958

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<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-22651
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 1022-02F
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047399540000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6515 Ext
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2393 FNL 1353 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 02 Township: 10.0S Range: 22.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES  <b>COUNTY:</b> UINTAH  <b>STATE:</b> UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 9/28/2011	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input checked="" type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 50px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The operator requests authorization to temporarily abandon the subject well location. The operator proposes to temporarily abandon the well to drill the NBU 1022-2F Pad. Please see attached procedures.

**Approved by the  
Utah Division of  
Oil, Gas and Mining**

Date: 09/29/2011  
By: *Dark K. Quist*

<b>NAME (PLEASE PRINT)</b> Jaime Scharnowske	<b>PHONE NUMBER</b> 720 929-6304	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 9/28/2011	

Well Name: **NBU 1022-2F** 8/31/2011  
 Surface Location: SENW Sec. 2, T10S, R22E  
 Uintah County, UT

API: 4304739954 LEASE#: ML-22651

ELEVATIONS: 5017' GL 5035' KB

TOTAL DEPTH: 8705' PBDT: 8655'

SURFACE CASING: 9 5/8", 36# J-55 @ 2181'

PRODUCTION CASING: 4 1/2", 11.6# I-80 @ 8700'  
 TOC @ Surface per CBL

PERFORATIONS: MESAVERDE 7444' - 8602'

Tubular/Borehole	Drift inches	Collapse psi	Burst psi	Capacities		
				Gal./ft.	Cuft/ft.	Bbl./ft.
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1624	0.02171	0.00387
4.5" 11.6# I-80	3.875	6350	7780	0.6528	0.0872	0.0155
9.625" 36# J-55	8.765	2020	3520	3.247	0.434	0.0773
Annular Capacities						
2.375" tbg. X 4 1/2" 11.6# csg				0.4227	0.0565	0.01
4.5" csg X 9 5/8" 36# csg				2.227	0.2977	0.053
4.5" csg X 7.875 borehole				1.704	0.2278	0.0406
9.625" csg X 12 1/4" borehole				2.3428	0.3132	0.0558

**GEOLOGICAL TOPS:**

4297' Wasatch  
 6647' Mesaverde

**Tech. Pub. #92 Base of USDW's**

USDW Elevation ~1500' MSL  
 USDW Depth ~3535' KBE

**Recommended future action for disposition of well bore:**

Temporarily abandon the wellbore during the drilling and completion operations of the NBU 1022-2F pad wells. Return to production as soon as possible once completions are done.

**NBU 1022-2F TEMPORARY ABANDONMENT PROCEDURE**

**GENERAL**

- H<sub>2</sub>S MAY BE PRESENT. CHECK FOR H<sub>2</sub>S AND TAKE APPROPRIATE PRECAUTIONS.
- CEMENT QUANTITIES BELOW ASSUME NEAT CLASS G, YIELD 1.145 CUFT./SX. IF A DIFFERENT PRODUCT IS USED, WELLSITE PERSONNEL ARE RESPONSIBLE FOR CORRECTING QUANTITIES TO YIELD THE STATED SLURRY VOLUME. WHEN SQUEEZING, INCLUDE 10% EXCESS PER 1000' OF DEPTH.
- TREATED FRESH WATER WILL BE PLACED BETWEEN ALL PLUGS INSTEAD OF BRINE.
- ALL DISPLACEMENT FLUID SHALL CONTAIN CORROSION INHIBITOR AND BIOCIDES. PREMIX 5 GALLONS PER 100 BBLs FLUID.
- NOTIFY UDOGM 24 HOURS BEFORE MOVING ON LOCATION.

**PROCEDURE**

**Note: An estimated 24 sx Class "G" cement needed for procedure**

1. MIRU. KILL WELL AS NEEDED. ND WH, NU AND TEST BOPE.
2. RU WIRELINE. ENSURE WELLBORE IS CLEAN. **A GPS READING WILL NEED TO BE TAKEN AT THE WELL SITE AND RECORDED IN OPENWELLS. PLEASE TAKE IT TO THE 6TH DECIMAL PLACE.**
3. **PLUG #1, ISOLATE WAS PERFORATIONS (7444' - 8602')**: RIH W/ 4 1/2" CBP. SET @ ~7390'. RELEASE CBP, PUH 10', BRK CIRC W/ FRESH WATER. PRESSURE TEST CASING TO 500 PSI. INFORM ENGINEERING IF IT DOESN'T TEST. DISPLACE A MINIMUM OF **8 SX/ 1.6 BBL/ 8.72 CUFT.** ON TOP OF PLUG. PUH ABOVE TOC (~7290'). REVERSE CIRCULATE W/ TREATED FRESH WATER.
4. **PLUG #2, PROTECT TOP OF WASATCH (4297')**: PUH TO ~4400'. BRK CIRC W/ FRESH WATER. DISPLACE A MINIMUM OF **16 SX / 3.3 BBL / 18.3 CUFT** AND BALANCE PLUG W/ TOC @ ~4190' (210' COVERAGE). PUH ABOVE TOC. REVERSE CIRCULATE W/ TREATED FRESH WATER.
5. LOWER WELLHEAD TO GROUND LEVEL TO ACCOMMODATE DRILLING OPS AND INSTALL MARKER PER UDOGM GUIDELINES.
6. RDMO. TURN OVER TO DRILLING OPERATIONS.

ALM 8/31/2011

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-22651
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b> NATURAL BUTTES
<b>1. TYPE OF WELL</b> Gas Well	<b>8. WELL NAME and NUMBER:</b> NBU 1022-02F	
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.	<b>9. API NUMBER:</b> 43047399540000	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6511	<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2393 FNL 1353 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 02 Township: 10.0S Range: 22.0E Meridian: S	<b>COUNTY:</b> UINTAH	
	<b>STATE:</b> UTAH	
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 12/2/2011  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input checked="" type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>The operator has concluded the temporary abandonment operations on the subject well location on 12/02/2011. This well was plugged in order to expand and drill the NBU 1022-11F Pad wells. Please see the attached chronological well history for details. Thank you.</p>		
<p><b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY February 13, 2012</b></p>		
<b>NAME (PLEASE PRINT)</b> Jaime Scharnowske	<b>PHONE NUMBER</b> 720 929-6304	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 2/13/2012	

US ROCKIES REGION  
**Operation Summary Report**

Well: NBU 1022-11F				Spud Date: 9/30/2004				
Project: UTAH-UINTAH			Site: NBU 1022-11F PAD			Rig Name No: WESTERN WELLSITE/UNK		
Event: ABANDONMENT			Start Date: 11/30/2011		End Date: 12/2/2011			
Active Datum: RKB @5,095.00usft (above Mean Sea Level)				UWI: NBU 1022-11F				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/23/2011	7:00 - 17:00	10.00	ABAND					PREJOB SAFETY MEETING, MIRU, BLOW DOWN WELL, NDWH, NUBOP, SDFN
11/28/2011	7:00 - 12:00	5.00	ABAND	35		P		Travel to location rig up run in hole and pull plunger from 7706 pooh run in hole and pull spring from 7706 pooh leave everything out for w/o rig down travel to next location
12/1/2011	7:00 - 17:00	10.00	ABAND					PREJOB SAFETY MEETING, BLOW DOWN WELL, KILL WELL WITH 90BLS FRESH WATER, RU SCAN TECH, TOH AND TEST TUBING, TIH WITH 3 7/8" BIT TO 5480', TOH, TIH WITH CIBP AND SET AT 5480', SDFN
12/2/2011	7:00 - 17:00	10.00	ABAND					PREJOB SAFETY MEETING, LOAD HOLE WITH 65BLS FRESH WATER WITH CORROSION INHIBITOR, PRESSURE TEST CASING TO 500PSI HELD, MIX AND PUMP 10SXS CLASS G CEMENT, TOH TO 4190', MIX AND PUMP 20SXS CLASS G CEMENT, TOH, NDBOP, NUWH, RDMO, SDFN